

Talent Pressures and the Aging Workforce:

Responsive Action Steps for the Manufacturing Sector



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The Sloan Center on Aging & Work at Boston College promotes quality of employment as an imperative for the 21st century multi-generational workforce. The Center integrates evidence from research with insights from workplace experiences to inform innovative organizational decision-making. Collaborating with business leaders and scholars in a multi-disciplinary dialogue, the Center develops the next generation of knowledge and talent management.

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The Industry and Aging Workforce Series

The Sloan Center on Aging & Work initiated the Talent Pressures and Aging Workforce Industry Report Series to help employers (and others interested in the aging of the workforce) understand the unique and emerging talent pressures within the leading sectors of the U.S. economy: Accommodation and Food Services; Administration and Support, Waste Management and Remediation Services; Construction; Finance and Insurance; Health Care and Social Assistance; Manufacturing; Professional, Scientific and Technical Services; Retail Trade; Transportation and Warehousing; and Wholesale Trade. The reports are designed to offer succinct accounts of five overarching concerns:

1. What are the contours of employment in the industry and how do they compare to employment in other sectors?
2. How might employee preferences inform strategies of retaining key talent in the industry?
3. How does the age and gender composition of the workforce map onto talent loss risks for employers?
4. What methods do employers in the industry rely on to understand talent loss risks?
5. What steps can employers use to attract and engage talent?

The report provides comparisons across time (2000-2008) and between economic sectors. Aging and workforce diversity is also considered.

Our analysis relies on three sources of data:

- Information about the U.S. workforce as reported by the Bureau of Labor Statistics,
- Information about workers' experiences as reported in the General Social Survey, and
- Information about U.S. organizations gathered by the Sloan Center on Aging & Work's 2009 Talent Management Study.

We anticipate that this information can help employers:

- Reflect on the adequacy of workplace practices,
- Identify ways to become more age responsive, and
- Consider strategies that might better align workplace practices with escalating pressures and opportunities that a diverse and aging workforce may pose for their enterprises.

Each report in this series concludes by considering steps that employers can take to become more responsive to the needs of a diverse and aging workforce.

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Executive Summary

The past decade witnessed profound changes in the economic pressures placed on employers, as well as in age demographics of their labor forces. Like the changes regarding the inclusion of women in organizations and professions in the latter part of the 20th century, the aging of the population has the potential to reshape not only who works, but also how work can be performed.

We advise that employers consider the data presented in this report to better understand what employees desire, as well as the variation in talent management practices evident within (and beyond) the manufacturing sector.

In comparison to other sectors, the manufacturing sector's demographic profile is disproportionately composed of older workers and men. The limited successes in attracting or retaining female workers may be symptomatic of organizational practices that will also likely fail to respond to the diverse needs and expectations of older workers. As manufacturing employers can expect a large-scale exodus of older workers in the forthcoming years, they may face especially strong tensions in matching workers to jobs. This may require rethinking longstanding workplace practices.

Our analysis reveals that many manufacturers have only a limited knowledge of their workforce. Their talent management strategies can benefit immensely by understanding factors – beyond financial compensation – that could attract replacement workers, stem turnover, and facilitate knowledge transfer. In comparison to other sectors, manufacturers are less inclined to integrate flexible work arrangements in their organizational designs and are more likely to exclude employees from decision making activities that could influence how jobs are performed. This can place them at a disadvantage in securing the best workers who possess the best skills.

Overview of Employment & Compensation in the Manufacturing Sector

INTRODUCTION

The manufacturing sector is a critical component of the U.S. economy, but it has experienced some formidable challenges and transformations in recent decades. The information presented shows that the manufacturing sector has experienced a decline in the size of its labor force, has been less successful recruiting and retaining female workers, has a workforce that is aging faster, and has declining compensation levels when compared to other industry sectors.

According to the U.S. Census Bureau, the manufacturing sector (NAICS 31-33):

“...comprises establishments engaged in the mechanical, physical, or chemical transformation of materials, substances, or components into new products. ...Establishments in the Manufacturing sector are often described as plants, factories, or mills and characteristically use power-driven machines and materials-handling equipment. However, establishments that transform materials or substances into new products by hand or in the workers home and those engaged in selling to the general public products made on the same premises from which they are sold, such as bakeries, candy stores, and custom tailors, may also be included in this sector. Manufacturing establishments may process materials or may contract with other establishments to process their materials for them. Both types of establishments are included in manufacturing.”

Key Points:

1. Manufacturers and their employees were hit even harder than most other industry sectors as a result of the 2008-2009 economic downturn.
2. While compensation costs for most employers had been rising (on average by 9.1% in all industries), compensation costs have plateaued in the manufacturing sectors, evidencing only a 1% increase in the manufacturing sector over the period of 2004-2008.
3. The total number of establishments in manufacturing declined by 6.6% over the period of 2000-2006, while there was a growth in the number of establishments in the wider economy.
4. Men are still significantly over-represented in the manufacturing sector in comparison to workers in other sectors. Only one in three (30.3%) manufacturing workers are women.
5. The percentage of workers in the manufacturing sector aged 55-64 increased significantly from 2000-2007, as did the proportion of workers over age 65.

EMPLOYMENT AND COMPENSATION

Although the manufacturing sector was the life-blood of the U.S. economy during most of the 20th century and remains important to the diverse economy of the 21st century, the proportion of American workers employed within that sector has declined significantly. In 2010, only 1 in 10 workers were employed in this industry, as compared to approximately 4 in 10 at its peak in the mid 1940s. However, the manufacturing sector remains vital to the U.S. economy, as it offers some of the highest paying jobs available, as well as indirectly contributes to employment opportunities in other sectors. Additionally, because the employment practices developed by manufacturers have been adopted by employers in other industries, it has been a key mover in the social and technological organization of work. Manufacturing is clear that maintaining the vigor of the manufacturing sector is key to advancing the economic health of the U.S. economy.

Table 1.1 Employment in The Manufacturing Sector

	Manufacturing			All Industries		
	2000	2008	% Change	2000	2008	% Change
Employment in Thousands (seasonally adjusted) ¹	17265	13423	-22.3	111003	114558	3.2
% Represented by Unions of Wage and Salary Workers ²	15.8	12.3	-22.2	14.9	13.7	-8.1
Separation Rates ^{1,3}	37.6 ⁵	33.3	-11.4	46.4 ⁵	48.7	5
Unemployment Rate (not seasonally adjusted) ⁴	3.5	5.8	65.7	4	5.8	46.43

Source: U.S. Bureau of Labor Statistics

1 Includes total private industries.

2 Excludes incorporated self employed of 16 and over.

3 Separation Rate is the number of total separations for the year divided by average monthly employment for the year (annual turnover).

4 Includes Civilian Labor Force of age 16 and over. Data from 2000 are for February. Data from 2008 are for January.

5 Data from 2001.

Table 1.1 and Table 1.2 show that manufacturers and their employees were hard hit as a result of the 2008-2009 economic downturn. Employment decreased by 22.3% over the period of 2000-2008 and the unemployment rate grew by 65.7% over the same period. These changes were considerably more severe in comparison to those that occurred in private industries, which accounted for a 3.2% increase in employment and a 46.3% increase in unemployment rate.

Table 1.2 The Main Labor Market Indicators of the Manufacturing Sector

	Manufacturing Sector (SOC 31-33)		
Employers	2000	2006	% Change
Total Establishments	354,498	331,062	-6.6
# Under 20 Employees	222,012	211,303	-4.8
# 20-99	67,334	60,727	-9.8
# 100-499	25,765	23,571	-8.5
# 500+	39,387	35,461	-10.0
Hours, Earnings, and Benefits ¹	2000	2008	% Change
Average Weekly Hours of Production Workers, (seasonally adjusted)	41.2	40.8	-1.1
Average Hourly Earnings of Production Workers, (seasonally adjusted) ²	17.9	17.7	-0.7
Compensation ³	2004	2008	% Change
Compensation Costs (\$/Hr) ²	31.3	31.7	1.0
Wages and Salaries as % of Compensation	65.0	66.0	1.5
Benefits as % of Compensation			
Total Benefits	35.1	34.1	-2.9
Insurance	9.1	9.9	8.5
Retirement	5.25	4.1	-21.9
Labor Turnover	2001	2008	% Change
Median Years of Tenure ⁴	4.9	5.9	20.41

Source: U.S. Bureau of Labor Statistics

1 Includes total private industries.

2 Adjusted for Consumer Price Index (2008=100).

3 The total compensation for all industries' includes private industries population.

4 The data from 2000 are for February. Data from 2008 are for January.

WORKER COMPENSATION

The manufacturing sector operates in distinct regulatory and organizational contexts that give shape to employment practices. Roughly 1 in 7 workers (15.8%) in the manufacturing sector were represented by unions, higher than other industries in 2000. However the influence of unions has declined significantly, and by 2008 union representation in the manufacturing sector more closely approximated that of total private industries. Because workers in the manufacturing sector work longer hours and are more likely to work full-time, they are entitled to benefits and securities that are less often available to workers in sectors that are more reliant on part-time labor. While compensation costs for most employers had been rising (on average by 9.1% in all industries), there had been only a 1% increase in the manufacturing sector over the period of 2004-2008. However, the compensation costs and the benefits available in the manufacturing industry still remain higher in comparison to those offered in the other industries combined. Shifts in benefits, as part of employer expenditures, were significant over the past decade. For example, the share of insurance as the percentage of total compensation increased both in the manufacturing sector and in all industries by 8% over the period of 2004-2008. Retirement payments as a percentage of compensation costs, however, significantly decreased in the manufacturing sector by about 22%, while staying fairly constant for employers operating in most sectors.

WORKFORCE COMPOSITION

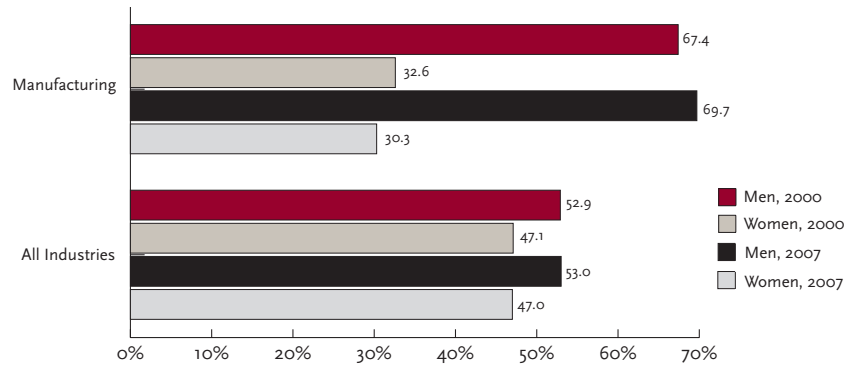
The total number of establishments in manufacturing declined by 6.6% over the period of 2000-2006 and the same pattern could be observed across different establishment sizes. Thus, while there has been a growth in the number of establishments in the wider economy, the opposite trend is evident in the manufacturing sector. To a great extent, this decline can be attributed to manufacturers closing operations, as well as to the movement of production off shore. This latter practice introduces new talent management challenges, as political and cultural factors can define what is practical to introduce in multinational contexts.

The characteristics of workers in the manufacturing sector continue to shift, both in terms of age and in terms of gender. In the mid-20th century, the typical manufacturing worker was a man, who often times had a stay-at-home wife. As Figure 1.1 shows, while men are still significantly over-represented in the manufacturing sector in comparison to workers in other sectors, one in three (30.3%) are women. The lives of these men and women are jammed with commitments and most cannot perform their jobs assuming that there will be someone else available to take care of expectable and unexpected family concerns.

As Figure 1.2 shows, the aging of the Baby Boomer generation is likely to have a greater impact on the manufacturing sector than on other sectors of the economy. The percentage of workers aged 55-64 who were in the labor force increased significantly, as did the proportion of workers over age 65. The same trend can be observed, in the manufacturing sector, where the changes for the above-specified age groups grew significantly. This presents manufacturing employers with the prospects of a large

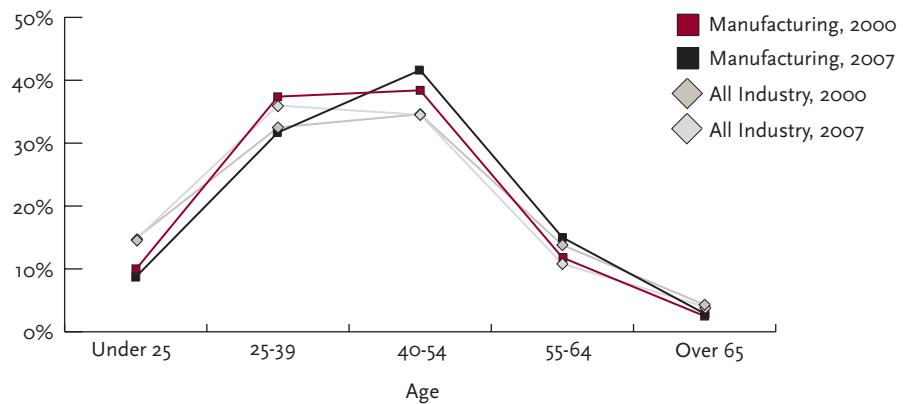
scale exodus from their workforces, and this loss will be considerably greater than that experienced in most other sectors. This, in turn, can create skill deficits and knowledge transfer gaps. The question is: how prepared are employers to maximize the potential of current employees, to recruit the best workers that are available, and to plan ahead for the inevitable exit of their aging workforces?

Figure 1.1 Gender Distribution of the Labor Force



Source: The Integrated Public Use Microdata Series (IPUMS-USA)

Figure 1.2 Age Distribution of the Labor Force



Source: The Integrated Public Use Microdata Series (IPUMS-USA)

ESSENTIAL OCCUPATIONS

A wide range of occupations are essential to the manufacturing sector, but it is distinguished by a heavy reliance on four essential occupations, shown in Table 1.3. Team assemblers account for the largest share in the total number of workers (about 6 %) and three other categories of workers, including (i) helpers-production workers, (ii) inspectors, testers, sorters, samplers, and weighers, and (iii) machinists, make-up equally about 2% shares in the total number of employees. While some production work, like assembly operations, can be performed by lower skilled labor, other forms of production work require considerable skill.

With a decline in rigid assembly processes (the type of low skilled work most likely to be off-shored), the success of domestic manufacturing enterprises often times rests on workers who have the skills to flexibly move from one activity to another, and who can work with technologies designed for rapid changes and production processes. Generally speaking, production work in this sector can no longer rely on lower educated individuals who labor on repetitious low-skilled tasks. Summary descriptions of these key occupations are described below, abstracted from the Bureau of Labor Statistics 2010-2011 Occupational Outlook Handbook (http://www.bls.gov/oco/oooh_index.htm).

Table 1.3 Employment by Essential Occupations, 2008

Helpers--production workers	320,240
Inspectors, testers, sorters, samplers, and weighers	324,910
Machinists	334,020
Purchasing agents, except wholesale, retail, and farm products	104,410
Team assemblers	833,870

Source: U.S. Bureau of Labor Statistics

Assemblers and Fabricators

Retrieved from the Bureau of Labor Statistics 2010-2011 Occupational Outlook Handbook

Assemblers and fabricators play an important role in the manufacturing process. They assemble both finished products and the pieces that go into them. Changes in technology have transformed the manufacturing and assembly process. Modern manufacturing systems use robots, computers, programmable motion control devices, and various sensing technologies. These systems change the way in which goods are made and affect the jobs of those who make them. Manufacturing techniques are evolving away from traditional assembly line systems toward “lean” manufacturing systems, which are causing the nature of assemblers’ work to change. Lean manufacturing uses teams of workers to produce entire products or components. Team assemblers may still work on an assembly line, but they rotate through different tasks, rather than specializing in a single task. This worker flexibility helps companies cover for absent workers, improves productivity, and increases

companies' ability to respond to changes in demand by shifting labor from one product line to another. Most full-time assemblers work a 40-hour week, although overtime and shift work are common in some industries. The education level and qualifications needed to enter these jobs vary depending on the industry and employer. While a high school diploma or GED is sufficient for most jobs, experience and extra training is needed for more advanced assembly work. Assemblers and fabricators held about 2.0 million jobs in 2008. They worked in many industries, but over 75% worked in manufacturing. Within the manufacturing sector, assembly of transportation equipment, such as aircraft, autos, trucks, and buses, accounted for 20% of all jobs. Assembly of computers and electronic products accounted for another 11% of all jobs. Other industries that employ many assemblers and fabricators are machinery manufacturing and electrical equipment, appliance, and component manufacturing. Employment is projected to experience little or no change, primarily reflecting productivity growth and strong foreign competition in manufacturing.

Helpers and Production Workers

Retrieved from the Bureau of Labor Statistics 2010-2011 Occupational Outlook Handbook

Helpers-production workers perform duties of lesser skill excluding apprentice workers and reporting them with the appropriate production occupation. Duties include supplying or holding materials or tools, and cleaning work area and equipment. Within the manufacturing sector, industries with the highest levels of employment in this occupation are Plastics Product Manufacturing and Converted Paper Product Manufacturing.

Machinists

Retrieved from the Bureau of Labor Statistics 2010-2011 Occupational Outlook Handbook

Machinists use machine tools, such as lathes, milling machines, and grinders, to produce precision metal parts. Although they may produce large quantities of one part, precision machinists often produce small batches or one-of-a-kind items. They use their knowledge of the working properties of metals and their skill with machine tools to plan and carry out the operations needed to make machined products that meet precise specifications. The parts that machinists make range from bolts to automobile pistons. Many machinists work a 40-hour week. Evening and weekend shifts are becoming more common, as companies extend hours of operation to make better use of expensive machines. However, this trend is somewhat offset by lights-out manufacturing that uses fewer machinists and the use of machine operators for less desirable shifts. Overtime work is common during peak production periods. Machinists train in apprenticeship programs, vocational schools, or community or technical colleges, or informally on the job. Many entrants previously have worked as machine setters, operators, or tenders. Machinists held about 421,500 jobs in 2008. About 78% of machinists work in manufacturing industries, such as machine shops and machinery, motor vehicle and parts, aerospace products and parts, and other transportation equipment manufacturing. Maintenance machinists work in most industries that use production machinery. Although employment of machinists is projected to decline slowly, job prospects are expected to be good.

SUMMARY

The manufacturing sector remains a prominent component of the U.S. economic landscape, but it is no longer the primary environment in which workers find jobs. Instead, it is part of what is now a much more diverse economy. For manufacturers, one challenge is to attract the best employees who might be attracted to work in other sectors. The provision of competitive wages has been one means of accomplishing this goal, but as we observed above, compensation in this industry has stagnated and in some respects declined over the past decade. Observing the limited success in respect to attracting and keeping female workers, as well as the inevitable large scale loss of older workers, suggests that *only* providing substantial compensation and benefits may not be sufficient to retain key talent. As we discuss in the next section, many employees are looking for work arrangements and returns on work that employers in the manufacturing sector often-times fail to provide.

Perspectives & Experiences of Employees in the Manufacturing Sector

INTRODUCTION

One of the most fundamental steps in managing talent is approaching employees from a “whole person” approach: understanding that jobs fit into the lives of individuals in diverse and complex ways. To help understand these dynamics as they map onto the manufacturing sector, data from the 1998-2008 General Social Survey are utilized.² The data are analyzed by age and gender to underscore how employees’ interests and capacities to engage in work vary throughout the life course. This multi-dimensional analysis can facilitate greater understandings of the aspects of work that can attract a diverse workforce, as well as the features of jobs that may lead to talent losses. We also considered how different aspects of workplace practices and job designs can shape employee commitments to employers and their work. The relationships between work incentives and organizational commitments; work-family conflicts; flexible work options; and inclusion in decision-making are also discussed.

Key Points:

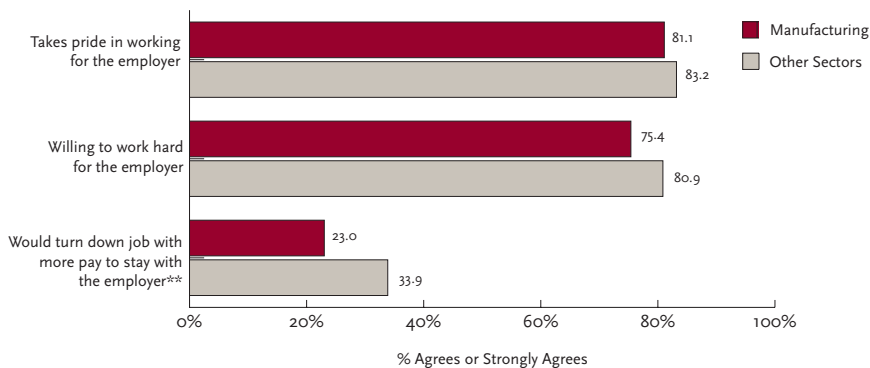
1. The typical worker in the manufacturing sector takes pride in the job and expresses a willingness to work hard. However, employees in this sector are significantly less likely to stay with their organization if they were offered a job with more pay.
2. Within the manufacturing sector, young and middle age employees put significantly more importance on having an interesting job compared with older employees. Also, women in manufacturing are more likely to value a job that provides opportunity to help others compared to the men.
3. Two in three (65.2%) middle age employees in the manufacturing sector come home from work too tired to take care of their household chores at least several times a month.
4. Approximately 45% of employees in the manufacturing sector are never allowed to change their schedule, compared to only 30% of employees in other sectors who are never allowed to change their schedule.
5. Only one in three manufacturing workers are engaged in decision-making task forces (34.8%) or work as part of a self-managed team (32.8%). Within manufacturing sector, women are more likely to be part of a self-managed team (42.4%) compared to men (28.3%).

WORK INCENTIVES AND ORGANIZATIONAL COMMITMENT

Organizational commitment is strongly associated with employee satisfaction with jobs. This satisfaction can translate to productivity – achieved by employees working harder, and by their long-term commitment to employers. Figure 2.1 shows that employees in the manufacturing sector are mostly on par with other sectors of the economy, as we observed no statistically significant differences between manufacturing workers and those employed elsewhere. They have comparably high levels of pride in their organization and are equally willing to work hard for their organization. Perhaps most important to note is that the typical worker in the manufacturing sector takes pride in the job and expresses a willingness to work hard. However, approximately one in five employees did not show these high levels of commitment and pride. As we discuss below, gaps between what workers want from their jobs and what employers currently provide can be substantial. Efforts to close these gaps may, in the end, result in moving greater proportions of employees to hold positive dispositions toward their work and relationships with their employers, which in turn could increase productivity and employee retention.

Another important finding revealed in Figure 2.1 is that employees in the manufacturing sector are significantly less likely to stay with their organization if they were offered a job with more pay compared to workers in other sectors. Regardless of its cause, this finding indicates that employers, especially those in the manufacturing sector, need to be attentive to the provision of competitive compensation, as the risk of losing talent is intricately tied to what workers earn in their jobs.

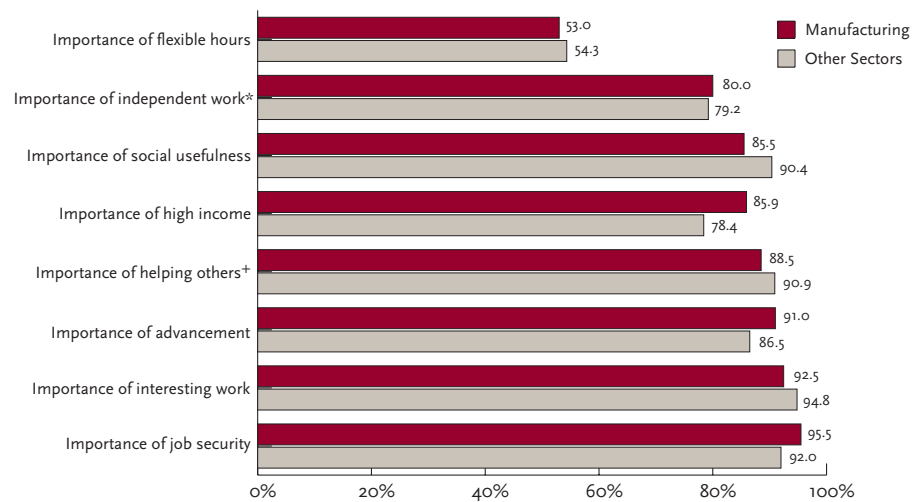
Figure 2.1 Organization Commitment: Manufacturing Employees in Comparison to Other Sectors



Note: Analyses from 2000-2008 General Social Survey; Individual items are reported in Appendix 2.2; Chi-Square tests used to assess significant differences, +p<.1 *p<.05 **p<.01; N=1009

Figure 2.2 shows that employees in the manufacturing sector are comparable to employees in other sectors in respect to the importance they place on a variety of job features. The General Social Survey reveals that job security, interesting work, potential for advancement, and ability to help others rank as important concerns. Some other job features that are comparably valued by a vast majority of employees (across sectors) are high income, being socially useful, autonomy to make decisions, and having flexible work hours. Manufacturing employees stand apart from the other sectors, however, as they tend to place a slightly lower value on performing work in an interesting job and their capacity to help others through their work in comparison to their counterparts in other sectors. But even so, these concerns rank high.

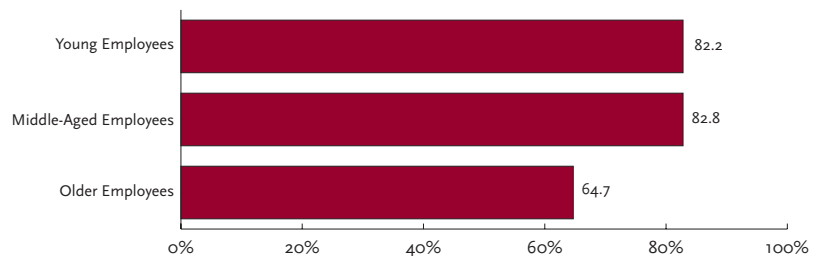
Figure 2.2 Job Incentives Rated as Important or Very Important: Manufacturing Employees In Comparison to Other Sectors



Note: Analyses from 2000-2008 General Social Survey; Individual items are reported in Appendix 2.2; Chi-Square tests used to assess significant differences, †p<.1 *p<.05 **p<.01; N=1505

Workers do not always put the same emphasis on the relative importance of different aspects of their jobs. As Figure 2.3 shows, within the manufacturing sector, young and middle-aged employees put significantly more importance on having an interesting job compared with older employees. Understanding that prospects for creative work can be a significant incentive for employees and can help employers attract the very best talent, especially when this prospect is structured into the ways jobs are presented to workers who are early or mid-course in their careers. For older employees, other incentives may prove more appealing. Because truly innovative job arrangements are often times lacking, such as those that bridge the span between full-time work and full-time retirement, these prospects are left unmeasured in our data.

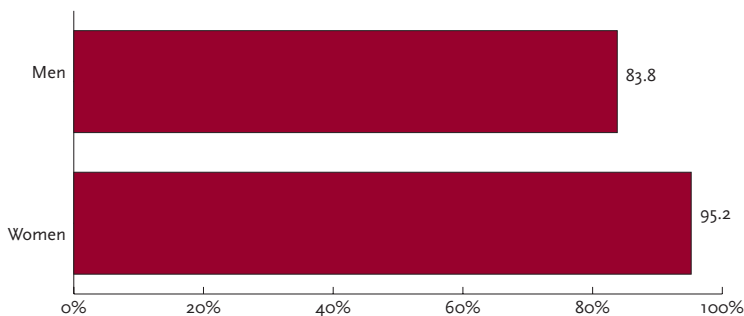
Figure 2.3 Employees Reporting that They Agree or Strongly Agree that Having an Interesting Job Is Important: Comparisons of Manufacturing Employees at Different Ages†



Note: Analyses from 2000-2008 General Social Survey; Individual items are reported in Appendix 2.2; Chi-Square tests used to assess significant differences, †p<.1 *p<.05 **p<.01; N=127

Figure 2.4 shows how gender can shape employee values as they relate to the enhancement of commitments to work. Among employees working in the manufacturing sector, women are more likely to value a job that provides opportunity to help others compared to men. For employers interested in attracting and retaining women (half of the labor force in the United States), structuring job designs that enable options for mentoring, job sharing, and perhaps, even community outreach, may be key strategies in maintaining access to the talents they possess.

Figure 2.4 Agreement that Helping Others in One’s Job Is Important or Very Important: Comparisons of Men and Women Employees in Manufacturing*



Note: Analyses from 2000-2008 General Social Survey; Individual items are reported in Appendix 2.2; Chi-Square tests used to assess significant differences, +p<.1 *p<.05 **p<.01; N=200

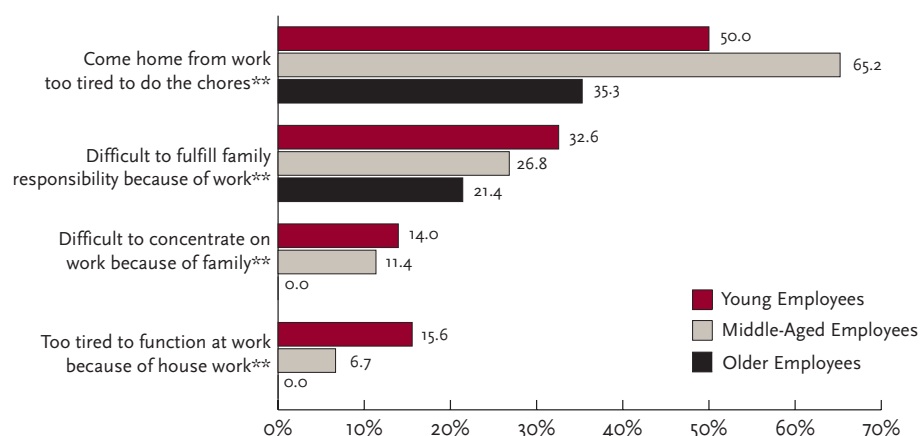
WORK-FAMILY CONFLICT

The past three decades of research by the “work-family” community of scholars has shown that work can impact the family in profound ways, and that family commitments can affect the capacity of workers to commit themselves to their jobs. While much attention has focused on the ways that work and family commitments interfere, a growing emphasis is placed on identifying approaches that harmonize these institutions, so that both employers and families benefit by rethinking work designs. However, because many employers have been slow to adapt their organizations, there still exist numerous mismatches, which result in strains that can undermine both workplace effectiveness and family functioning. As we discuss below, most employees report that what happens at home has a significant negative impact on their performance at their jobs, a concern that warrants greater attention.

To better understand the unique aspects of work in the manufacturing sector and how it impacts the lives of employees on and off the job, we examined a series of questions in the General Social Survey related to the intersection of work and family. We found that employees in manufacturing sector are, on the whole, on par with the employees in other sectors. Work-family conflicts are commonly experienced and this presents numerous challenges to employees that can potentially impede their performance. In addition, we found significant differences among employees in the manufacturing sector, including differences by age groups and gender.

Figure 2.5 shows statistically significant differences between age groups for a variety of work-family conflicts. Substantial proportions of manufacturing employees – as much as two in three middle-aged employees in the manufacturing sector – reported that they come home from work too tired to take care of their household chores at least several times a month. Some employees also report that it is difficult for them to fulfill family responsibilities because of their job. Roughly one in ten middle-aged and young manufacturing employees reported that they come to work distracted and tired because of their family commitments at least several times a month or more. In work environments where mistakes can be costly, this can be of great concern. Younger employees and employees at mid-life are the most affected by work-family conflict. However, employers may find that some of their older employees (for example, those caring for an elderly relative or grandchildren) may also report high levels of work-family conflict. Employers in the manufacturing sector may want to take this information into account when developing policies to help their employees perform at their best levels. Work-family conflict can threaten employee retention; unaddressed, this can impact productivity.

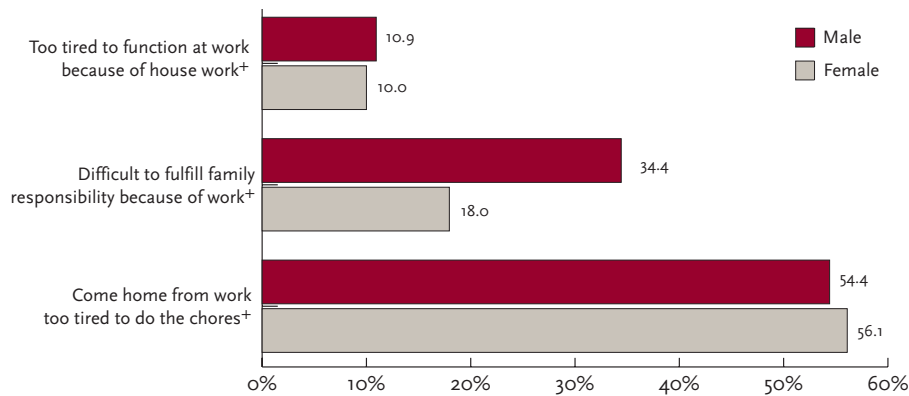
Figure 2.5 Percent of Employees Who Experience Work-Family Conflicts At Least A Few Times a Month or More: Comparisons of Manufacturing Employees at Different Ages



Note: Analyses from 2000-2008 General Social Survey; Individual items are reported in Appendix 2.2; Chi-Square tests used to assess significant differences, +p<.1 *p<.05 **p<.01; N=147

Although work-family conflicts are commonly cast as a “women’s issue,” as Figure 2.6 shows, these conflicts affect men in the manufacturing sector in much the same way as they affect women. However, note that men are more likely to report that it is difficult to fulfill family responsibilities because of their work responsibilities. One reason for this gender disparity is that some women, when pulled between work and family, quit their jobs to find more family-friendly employment situations. This could be one reason why women are under-represented in the manufacturing sector. These findings also indicate changing expectations of men, who no longer want to define themselves solely as primary breadwinners, and who seek more fulfilling interactions with their children, spouse, and aging parents.

Figure 2.6 Percent of Employees Who Experience Work-Family Conflicts At Least A Few Times a Month or More: Comparisons of Men and Women Manufacturing Employees



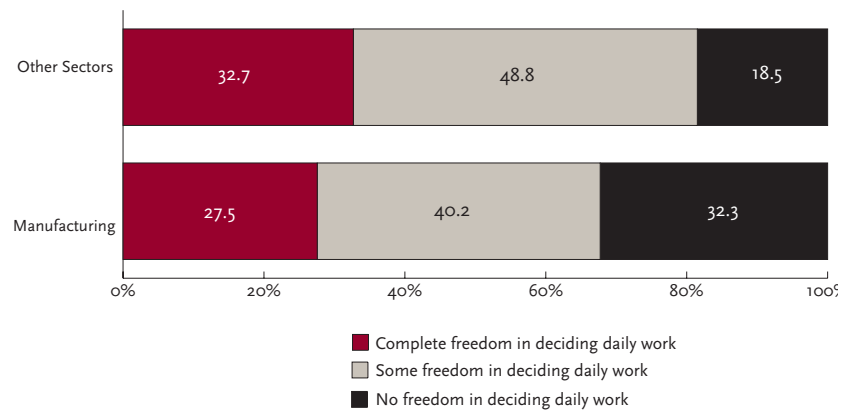
Note: Analyses from 2000-2008 General Social Survey; Individual items are reported in Appendix 2.2; Chi-Square tests used to assess significant differences, ⁺p<.1 *p<.05 **p<.01; N=147

FLEXIBLE WORK OPTIONS AND INCLUSION IN DECISION-MAKING

One way of maximizing access to talent is to provide flexible work options and to include employees in decision-making activities. These arrangements enable workers to do their jobs in ways that challenge more rigid job designs by allowing them, for example, to work according to different schedules and at different locales. As we previously identified, there are aspects to manufacturing work that may impact the extent to which employers can introduce options for work off-site. However, there may be lessons learned by considering means to introduce schedule and career flexibility as evidenced in other sectors of the economy.

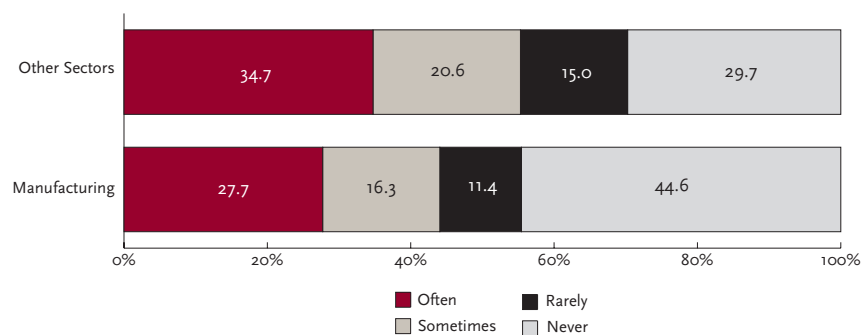
Figure 2.7 and 2.8 show that manufacturing workers have significantly less autonomy and fewer opportunities to change their work arrangements in comparison to workers in other sectors of the economy. More than 30% of employees in the manufacturing sector report that they have no freedom in deciding how to perform their work, as compared to less than 20% of employees in other sectors. Similar to Figure 2.7, Figure 2.8 shows that there is a significant difference between manufacturing and other sectors in the availability of flexible schedule options. Approximately 45% of employees in the manufacturing sector report that they are never allowed to change their schedule, compared to only 30% of employees in other sectors.

Figure 2.7 Freedom to Decide Daily Work Activities: Manufacturing Employees In Comparison to Other Sectors**



Note: Analyses from 2000-2008 General Social Survey; Individual items are reported in Appendix 2.2; Chi-Square tests used to assess significant differences, +p<.1 *p<.05 **p<.01; N=1014

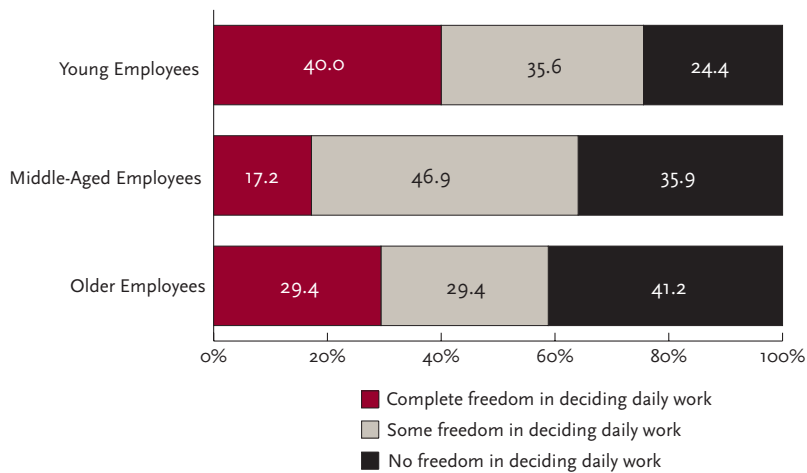
Figure 2.8 Freedom to Change Work Schedules: Manufacturing Employees In Comparison to Other Sectors**



Note: Analyses from 2000-2008 General Social Survey; Individual items are reported in Appendix 2.2; Chi-Square tests used to assess significant differences, +p<.1 *p<.05 **p<.01; N=3481

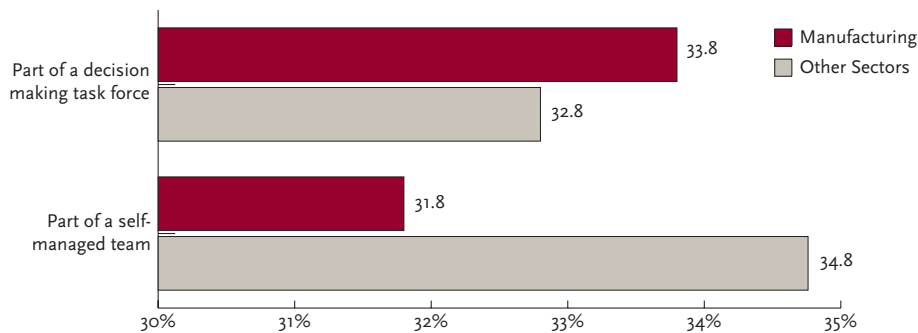
The capacity to change activities is linked to age, but not in the ways we would have expected. Those most likely to experience some or complete freedom in deciding work activities are younger and middle-aged workers. Our analysis reveals that older employees are significantly less likely to have freedom in deciding their daily work activities when compared with the middle-aged and younger employees. With the increasing importance of addressing the needs and interests of the aging workforce, it may be of value to employers in the manufacturing sector to consider the extent that older workers would value the autonomy that is currently more allocated to younger workers.

Figure 2.9 Freedom to Decide Daily Work Activities: Comparisons of Manufacturing Employees at Different Ages⁺



Note: Analyses from 2000-2008 General Social Survey; Individual items are reported in Appendix 2.2; Chi-Square tests used to assess significant differences, ⁺p<.1 *p<.05 **p<.01; N=127

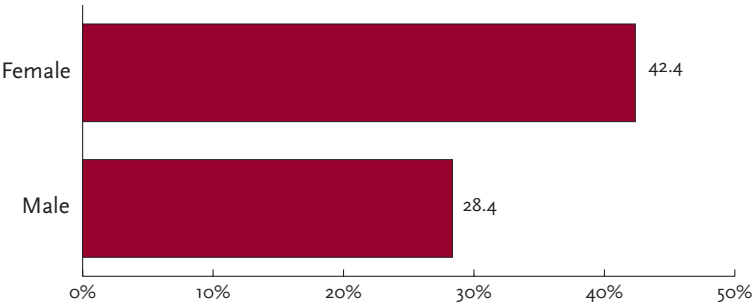
Figure 2.10 Engagement in Decision Making: Manufacturing Employees In Comparison to Other Sectors



Note: Analyses from 2000-2008 General Social Survey; Individual items are reported in Appendix 2.2; Chi-Square tests used to assess significant differences, ⁺p<.1 *p<.05 **p<.01; N=1684

In addition to increasing incentives and options for flexible work, workplace effectiveness can potentially be enhanced by increasing employee engagement in decision-making processes. Through this means, employees can identify the aspects of their jobs that make work difficult, as well as inform their work teams and supervisors of alternate approaches to performing jobs. Figure 2.10 shows that there are no significant differences between manufacturing workers and those employed in other sectors. Only one in three manufacturing workers engaged in decision-making task forces or work as part of a self-managed team. Figure 2.11 shows that within manufacturing sector women are more likely to be part of a self-managed team.

Figure 2.11 Work as Part of a Self-Managed Team: Comparisons of Men and Women Manufacturing Employees



Note: Analyses from 2000-2008 General Social Survey; Individual items are reported in Appendix 2.2; Chi-Square tests used to assess significant differences, +p<.1 *p<.05 **p<.01; N=186

SUMMARY

Employees in the manufacturing sector show high levels of commitment to their jobs and organizations, but there is potential to increase the level of commitment. One strategy for doing so is to structure jobs in ways that minimize work-family conflicts, as well as open opportunities for employees to work off-site or on different schedules that suit their unique interests and work-styles. Manufacturers are less likely to do this than employers in other sectors and are also less likely to engage employees in decision-making activities. It is evident that many workers expect more from their jobs than simply a paycheck. For employers wishing to attract and retain older workers and women, integrating flexible work options and packaging jobs within a framework that helps workers feel that they are helping others through their work may translate into enhanced commitment and talent stability.

Organizational Responses in the Manufacturing Sector to a Diverse, Multigenerational Workforce

INTRODUCTION

One of the primary questions for employers in the manufacturing sector concerns the means to access, retain, and motivate key talent. Manufacturers also need to be able to identify the risks of talent losses, and to anticipate the means of addressing those events when they occur.

In this section, we consider how manufacturers are responding to the economic and talent pressures identified in the previous sections. To do so, we report analyses of data gathered from the 134 manufacturing organizations that participated in the 2009 Talent Management Study (which gathered data from a total of 696 organizations). Variation within the manufacturing sector, such as how practices vary between small, medium, and large employers is explored. We also compare the manufacturing industry, as a whole, to employers that operate in nine other leading sectors in the economy. Talent management practices of manufacturers that reported the aging of the workforce would have a “negative” or “very negative” impact on the economic environment in which they operate in the next three years to other manufacturers in lower pressured situations are also compared. A detailed description of methods of studying the 2009 Talent Management Study, its samples and measures, as well as additional relationships, are presented in Appendix 3.1 to Appendix 3.6.

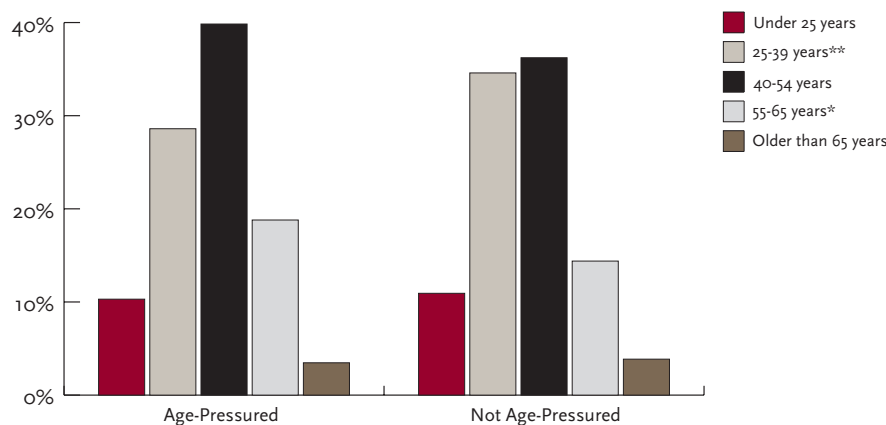
Key Points:

1. Manufacturers employing older workers (workers aged 40-65) were more likely to report that the aging of the workforce will negatively affect their operations compared to other sectors.
2. A lower percentage of manufacturers have analyzed the projected retirement rates (17%) or developed succession plans to a moderate/great extent (26%) compared to employers in other industries (25% and 39%, respectively).
3. Age-pressured manufacturers are more likely than non-pressured manufacturers to have assessed 1). talent losses associated with retirement (26% v. 7%), and 2). supervisors' ability to anticipate and plan for staffing needs in the future (49% v. 32%).
4. In comparison to employers in other sectors, manufacturers offer fewer flexible work options to most or all of their employees.
5. Acceptance of a culture of flexibility is lower in the manufacturing sector compared to employers in other industries.
6. A larger percentage of small manufacturers have established options to work in a flexible manner (27%) compared to medium (8.5%) and large manufacturers (14%).

AGE PRESSURES, TALENT NEEDS AND TALENT LOSS RISKS

As the previous section discussed, employees in the manufacturing sector tend to be older than those employed in other sectors of the economy. Figure 3.1 shows how these demographics can translate into the identification of age pressures as an organizational concern. Those manufacturers that had greater proportions of older employees were more likely to report that the aging of the workforce is going to have a negative or very negative impact on their operations in the next three years (henceforth, these employers are called “age-pressured”).

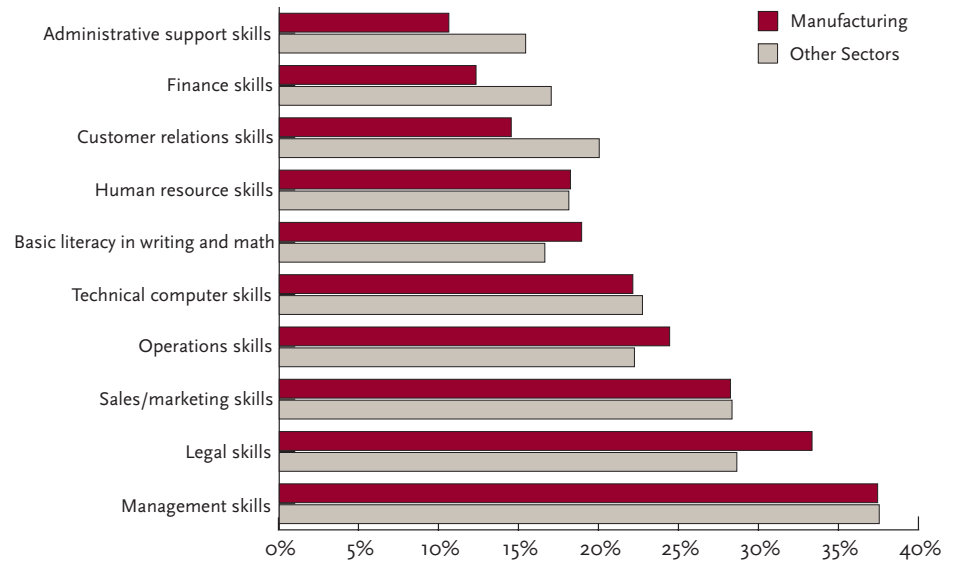
Figure 3.1 Age Demographic Comparisons of Employers Who Identified That the Aging Workforce Will Negatively Affect or Very Negatively Affect Their Operations with Those That Did Not View This as a Concern: 2009 Talent Management Study



Note: Analyses from 2009 Talent Management Study, manufacturing sector only; Individual items are reported in Appendix 3.1-3.5; Chi-Square tests used to assess significant differences, +p<.1 *p<.05 **p<.01; N=123

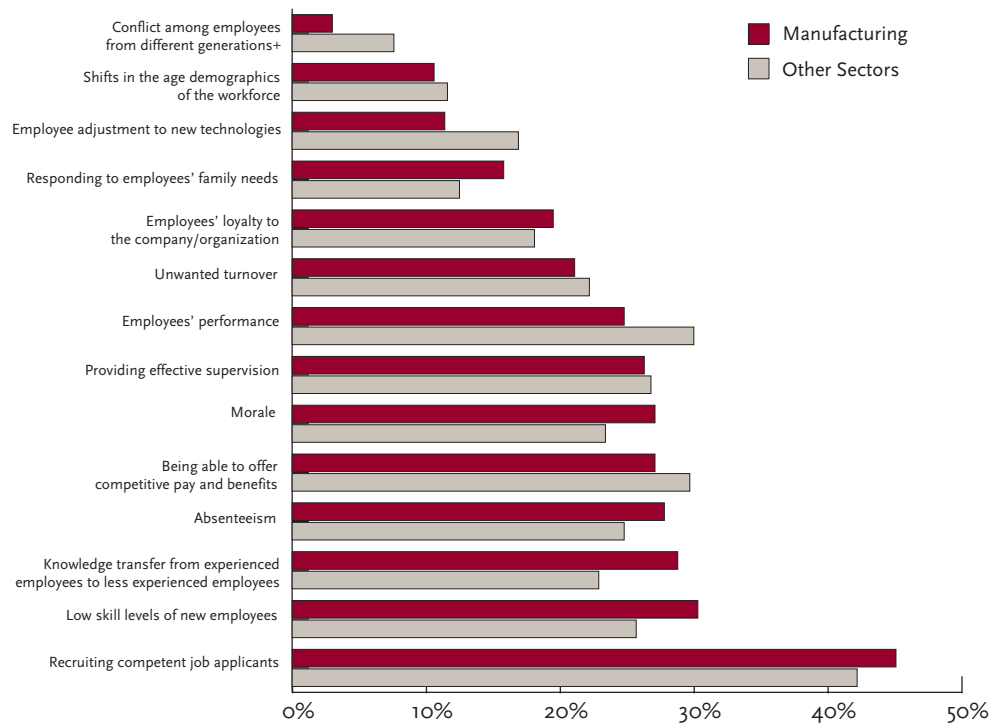
What types of talent sets are in short supply? Figure 3.2 shows that manufacturers are experiencing the same types of skill shortages that are evident in other sectors of the economy, as we observed no statistically significant differences between these two groups of employers. The need for employees with management skills, legal skills, sales and marketing skills was noted by substantial proportions of manufacturers. Because these same skills are in short supply in other sectors, this means that the pressure to locate and keep workers with these talents may be felt even more strongly as older workers exit the labor force.

Figure 3.2 Skills in Short Supply to a Moderate/Great Extent in the Manufacturing Sector: 2009 Talent Management Study



Note: Analyses from 2009 Talent Management Study; Individual items are reported in Appendix 3.1-3.5; Chi-Square tests used to assess significant differences, +p<.1 *p<.05 **p<.01; N=685

Figure 3.3 Talent Recruitment and Loss Risks (Reported at a Moderate/Great Extent) in the Manufacturing Sector compared to Other Sectors: 2009 Talent Management Study

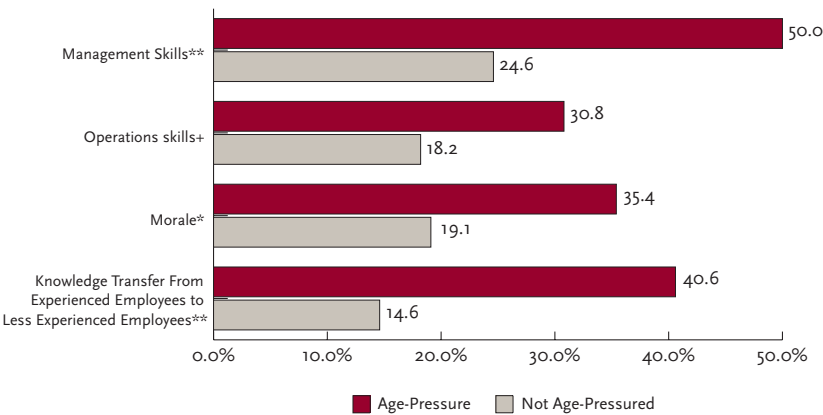


Note: Analyses from 2009 Talent Management Study, manufacturing sector only; Individual items are reported in Appendix 3.1-3.5; Chi-Square tests used to assess significant differences, +p<.1 *p<.05 **p<.01; N=123

When asked about what problems organizations face regarding talent management, the concerns most frequently expressed by employers were in the areas of recruitment, compensation, morale, skills, and skill transfers. As Figure 3.3 shows, there were no significant differences between these talent management concerns in the manufacturing sector and in the other sectors of the economy. However, the financial risk of losing employees is considerably higher for manufacturers, as the median cost of replacing employees in the manufacturing sector is \$5000 per employee compared to \$3000 per employees in other sectors.

As Figure 3.4 shows, age pressures strongly predicted the talent needs of employers in the manufacturing sector. Most notably, age-pressured manufacturers were significantly more likely to report that they had short supplies of workers with management skills and operations skills than lower-pressured employers. They also reported that they had greater problems with maintaining employee morale and experienced more challenges transferring knowledge from more experienced to lesser experienced employees.

Figure 3.4 Challenges in Maintaining Access to Talent to a Moderate or Great Extent in the Manufacturing Sector by Age Pressures: 2009 Talent Management Study



Note: Analyses from 2009 Talent Management Study, manufacturing sector only; Individual items are reported in Appendix 3.1-3.5; Chi-Square tests used to assess significant differences, +p<.1 *p<.05 **p<.01; N=133

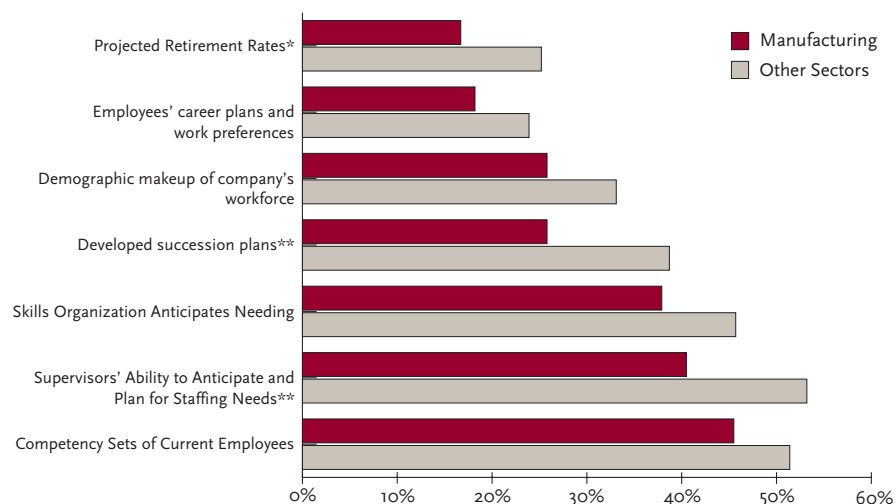
ASSESSMENT

The churn of the economy and the entry/exit of workers will change the demographic composition of the workforce at many companies. With the large exodus of the Baby Boomer generation from the workforce, there are strong prospects that entire talent sets could be lost – that is, unless systematic means of identifying skill/knowledge needs are engaged.

Participants in the Talent Management Study were asked to identify the extent that their organization engaged in planning steps to ensure that it would have the people it needed, today and in the future. Are employers in the manufacturing sector prepared for the challenges that may be associated with changes in the age composition of the workforce?

Figure 3.5 shows that manufacturers, on the whole, engage in assessment steps at levels generally comparable, but also sometimes lower, to employers operating in other sectors. The Talent Management Study reveals that the primary assessment activities included: appraising supervisors' abilities to anticipate staffing needs, understanding the competency sets of employees, and considering the skills the organization anticipates needing. Less frequently did employers assess the demographic make-up of the enterprise, develop succession plans, gauge employee career plans or work preferences, or project retirement rates. Manufacturing enterprises stand apart from the other sectors, however, as they tend to engage in significantly less succession planning, institute fewer initiatives to project retirement rates, and had less information to gauge their supervisors' ability to anticipate and plan for staffing needs. This is interesting because it suggests that many manufacturing companies, which are among those enterprises most threatened by the aging of the workforce, have limited knowledge of the factors that might exacerbate the levels of risk to their organizations.

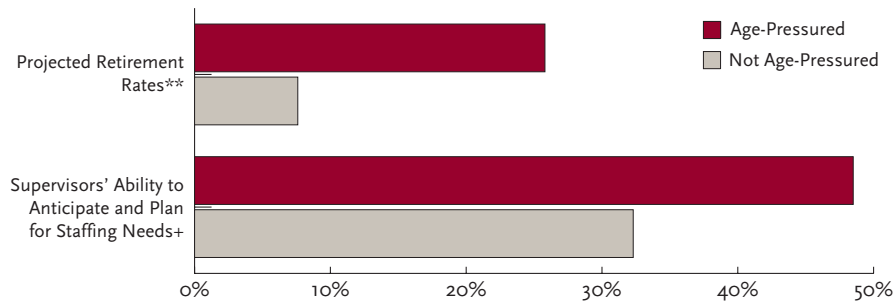
Figure 3.5 Assessment Activities Engaged in to a Moderate/Great Extent in the Manufacturing Sector Compared to Other Sectors: 2009 Talent Management Study



Note: Analyses from 2009 Talent Management Study; Individual items are reported in Appendix 3.1-3.5; Chi-Square tests used to assess significant differences, +p<.1 *p<.05 **p<.01; N=688

It is also interesting to observe that age-pressured manufacturers responded to these assessment concerns differently than manufacturers that were less pressured. As Figure 3.6 shows, employers, for whom the concern of an aging workforce was most pressing, appeared to have ramped up assessment activities in two respects. First, they were more focused on understanding the likelihood of employee losses associated with retirement. Second, they were also more engaged in assessing how well their supervisors respond to staffing needs in comparison to less pressured employers operating in their sector.

Figure 3.6 Assessment Activities Engaged in to a Moderate/Great Extent with Age-Pressured Manufacturers Compared to Manufacturers That Are Lower-Pressured: 2009 Talent Management Study



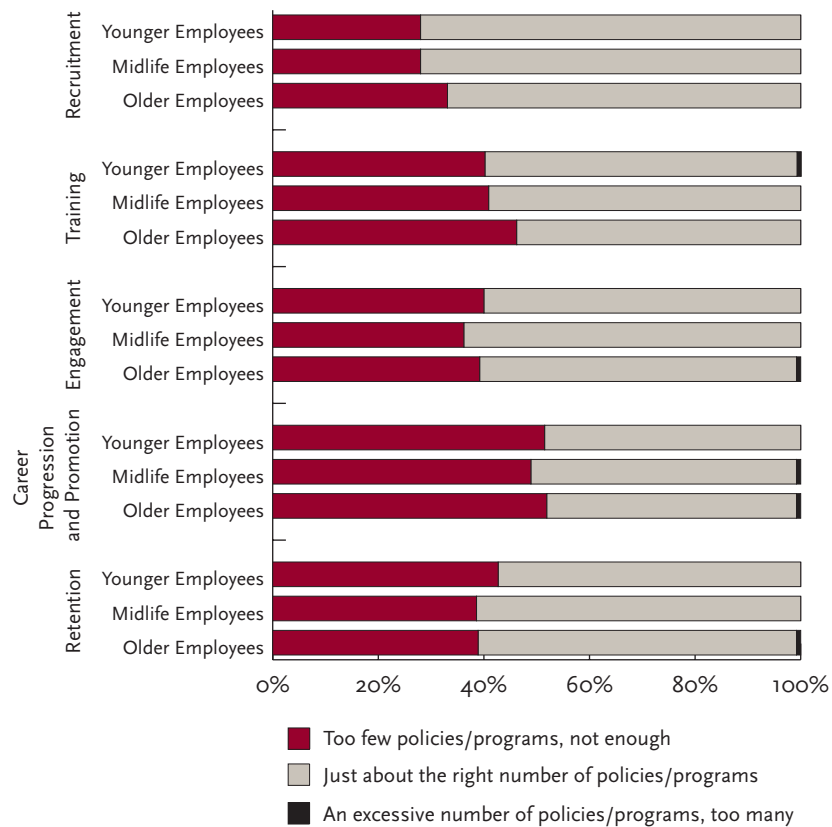
Note: Analyses from 2009 Talent Management Study, manufacturing sector only; Individual items are reported in Appendix 3.1-3.5; Chi-Square tests used to assess significant differences, +p<.1 *p<.05 **p<.01; N=132

RECRUITMENT AND CAREER DEVELOPMENT

In what ways are employers altering the structure of jobs and their approaches to attracting and retaining talent? Responses from the Talent Management Study indicate that many manufacturers are rethinking their approaches to talent management. The scope of policies and programs designed to recruit and retain employees of different ages is one indicator of organizational attention to the changing workforce.

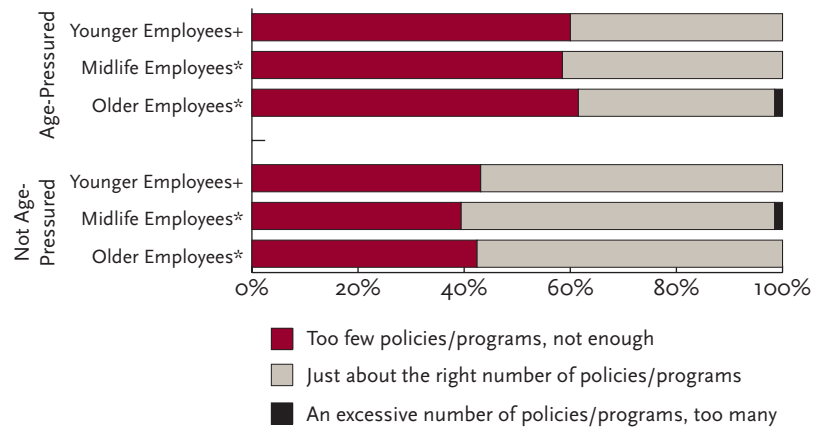
As Figure 3.7 shows, it is rare for any company to have “too many” programs for any aspect of recruitment and employee development, regardless of the age group of employees. As many as one in four to one in two companies reported that they had “too few” programs, indicating a considerable need for expansion of recruitment and career development programs. Most notable is the identification of the need for more career progression and promotion programs, something critical both to the continued engagement of older workers who are currently at the workplace as well as to the replacement of workers aging into retirement who may leave in the future. Again, we observe that the pressures of an aging workforce are related to the scope of some talent management practices. In the manufacturing sector, as Figure 3.8 shows, age pressured employers were considerably more likely to identify the need for more career progression programs.

Figure 3.7 Career Programs/Policies Offered to Employees in the Manufacturing Sector: 2009 Talent Management Study



Note: Analyses from 2009 Talent Management Study, manufacturing sector only; Individual items are reported in Appendix 3.1-3.5; N=132

Figure 3.8 Career Programs/Policies Offered to Employees in the Manufacturing Sector by Age Pressure: 2009 Talent Management Study

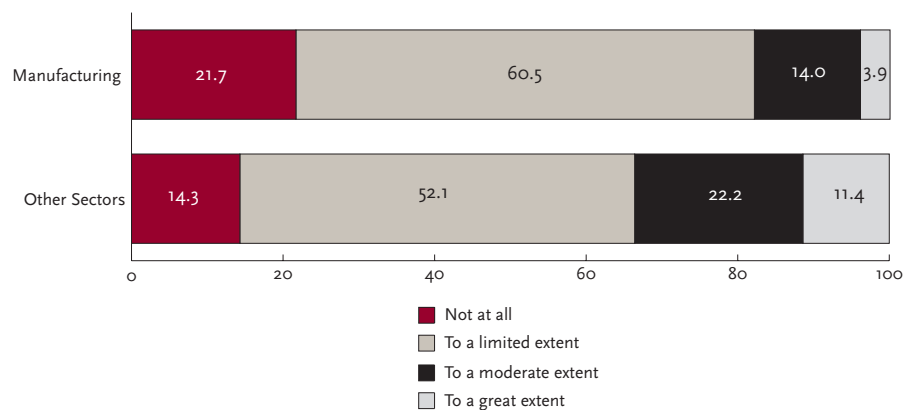


Note: Analyses from 2009 Talent Management Study, manufacturing sector only; Individual items are reported in Appendix 3.1-3.5; Chi-Square tests used to assess significant differences, +p<.1 *p<.05 **p<.01; N=132

FLEXIBLE WORKPLACE PRACTICES

One means of attracting and retaining key talent is to introduce and expand workplace flexibility, offering workers options in terms of where, when, and how work is to be performed. The aging of the workforce offers employers an opportunity to re-vitalize any prior effects to advance their flexible work options, since older workers (like their younger colleagues) express a preference for access to flexible work options. The Talent Management Study found that approximately 40% of the manufacturing organizations, and approximately 46% of the organizations in other sectors, reported that workplace flexibility somewhat/significantly increases business effectiveness. However, as we saw with the analysis at the individual level with the data from the General Social Survey, organizational level data from the Talent Management Study shows that manufacturers offer less flexibility in comparison to those operating in other sectors. As Figure 3.9 shows, in comparison to the 33.6% of employers in other sectors that have established options that allow employees to work in a flexible manner (to moderate/great extent), only one in five (18%) organizations in the manufacturing sector have responded likewise. Likely, some rigidities stem from the imperatives of the production process, which can prohibit flex-place arrangements, such as allowing employees to work off-site.

Figure 3.9 Establishing the Options for Employees to Work in a Flexible Manner: Manufacturers Compared to Employers in Other Sectors : 2009 Talent Management Study



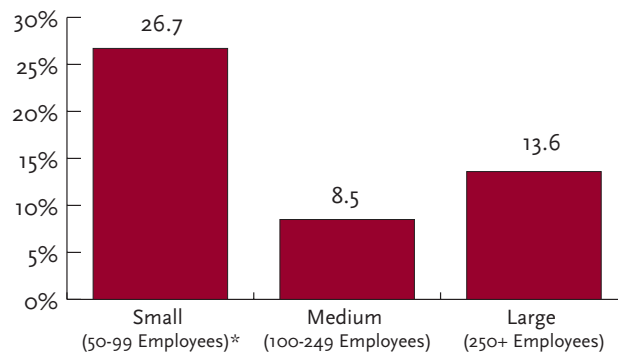
Note: Analyses from 2009 Talent Management Study; Individual items are reported in Appendix 3.1-3.5; Chi-Square tests used to assess significant differences, +p<.1 *p<.05 **p<.01; N=647

It is also interesting to observe that enterprise size strongly predicted the availability of flexible options. Figure 3.10 shows that one in four small manufacturers (those employing fewer than 100 workers) established flexible work options to a moderate or great extent, a rate that was two to three times higher than medium sized and large sized employers. It is possible that small employers within the manufacturing sector may be more nimble at implementing flexibility at the workplace, and are thus at a leading edge in implementing new flexible work arrangements.

What types of flexible options are manufacturers offering? How do they compare to other sectors? Figure 3.11 shows that the most common type of flexibility offered is

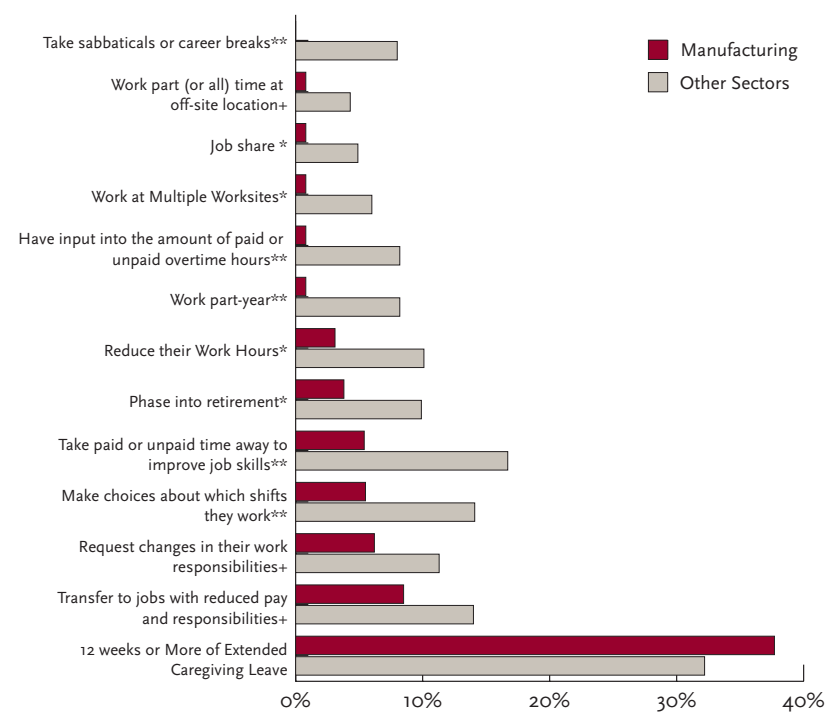
that of providing 12 weeks or more of paid or unpaid leave time for care-giving needs.³ Note, though, that most other types of flexible arrangements are offered much less frequently to workers in the manufacturing sector. In comparison to other sectors, workers in the manufacturing sector have fewer options to take career breaks, work off-site, job share, work at multiple worksites, have input about paid/unpaid overtime, work part-year, reduce their work hours, phase into retirement, take paid/unpaid time to improve job skills, choose work shift, request changes in work responsibility, or transfer to a job with reduced pay and responsibilities. Prevalent attitudes and expectations at the workplace about important policies, such as workplace flexibility can affect utilization rates.

Figure 3.10 Percents of Small, Medium and Large Manufacturing Employers That Allow Employees to Work in a Flexible Manner To A Moderate or Great Extent : 2009 Talent Management Study



Note: Analyses from 2009 Talent Management Study, manufacturing sector only; Individual items are reported in Appendix 3.1-3.5; Chi-Square tests used to assess significant differences, +p<.1 *p<.05 **p<.01; N=129

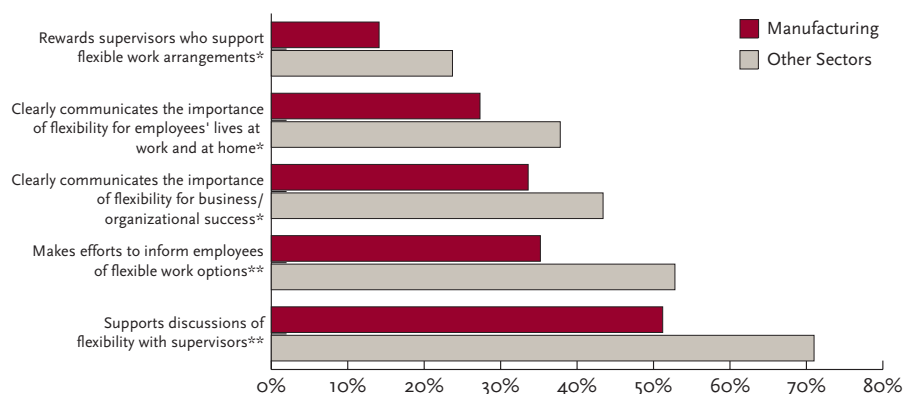
Figure 3.11 Flexible Arrangements Available to Most or Nearly All Employees in the Manufacturing Sector compared to Other Sectors: 2009 Talent Management Study



Note: Analyses from 2009 Talent Management Study; Individual items are reported in Appendix 3.1-3.5; Chi-Square tests used to assess significant differences, +p<.1 *p<.05 **p<.01; N=646

As Figure 3.12 shows manufacturing enterprises are much less likely to stress workplace flexibility concerns as core priorities in their talent management strategies. The establishment of flexible work arrangements can be an essential strategy for business success and a promising response to the diverse and aging workforce; however, the manufacturing sector appears to be at a competitive disadvantage in its current practices and prioritizations of these issues.

Figure 3.12 Presence of a Culture of Flexibility is Generally True or Very True in the Manufacturing Sector compared to Other Sectors: 2009 Talent Management Study



Note: Analyses from 2009 Talent Management Study, manufacturing sector only; Individual Items are reported in Appendix 3.1-3.5; Chi-Square tests used to assess significant differences, +p<.1 *p<.05 **p<.01; N=129

SUMMARY

When compared to organizations in other sectors, manufacturers have similar talent management problems and experience some of the same skills shortages. Manufacturers engage in significantly less succession planning, are less likely to assess their projected retirement rates, and are less likely to have assessed a supervisor's ability to anticipate and plan for staffing needs compared to other sectors. The exit of older workers from the manufacturing sector may exacerbate these talent management challenges. Interestingly, within the manufacturing sector, age-pressured manufacturers reported greater assessment of projected retirement rates and supervisor's ability to anticipate for staffing needs, suggesting that these organizations may be more prepared for the aging of their workforce as a result of the pressures they are currently experiencing. Because manufacturing employers commonly report having too few programs and policies for recruitment and employee development across employee age groups, this may be an avenue for improving talent pools. Finally, manufacturers offer fewer flexible work options to most or all of their employees compared to other organizations. While there may be aspects of the production process that require rigidities in respect to where employees work, there may be considerable room for innovation regarding advancing flexibility in respect to scheduling, career breaks, and career transitions as a means of attracting and retaining employees.

Conclusion: Transferring Knowledge to Action in the Manufacturing Sector

D*emographic transformations in the workforce are escalating the pressures exerted on manufacturers to locate key talent. As increasing numbers of older manufacturing workers exit the labor force, the risks of talent deficits are likely to escalate.*

Manufacturing organizations are less likely than organizations in other sectors to engage in succession planning activities, such as projecting retirement rates or assessing supervisors' ability to anticipate and plan for staffing needs. Forward-thinking employers in the manufacturing sector can begin their talent management planning by addressing questions, such as:

- What information do we have and what information do we need to understand current and future talent needs?
- What steps can we take to more fully engage the current multi-generational workforce?
- How can we facilitate the transfer of knowledge from late to early career employees?
- How will we find and attract new employees to fill our future needs?

The shifting age demographics of the manufacturing workforce might provide employers in this sector with incentives to re-design their human resource policies and practices, much the way that some of them have re-designed their supply chains. Employers might want to explore options to replace rigid scheduling practices with alternate arrangements. The expansion of flexible work options might help manufacturers to attract new segments of the workforce that bring needed skills, engage current employees, and retain experienced employees who have the critical competencies needed for the transition into the next decade.

Many of today's organizational practices were designed for yesterday's workforce. The talents of today's workforce are not being fully engaged and it is inevitable that many of these workers will exit in the forthcoming years. Mobilizing organizations to understand future talent needs, and developing strategies of accessing that talent, may be critical to securing favorable prospects in a diverse and aging society.

Appendix 1.1

Age/Economic Pressure Map

IDENTIFY YOUR WORKFORCE PLANNING RESPONSES:

Organization:	Completion Date:
Part 1. Current State Analysis—What Are Your Pressures?	
<p>1. What impact will the aging of the workforce have on your organization over the next 3 years?</p> <p> 1 <input type="radio"/> Very negative 2 <input type="radio"/> Negative 3 <input type="radio"/> Not negative or positive 4 <input type="radio"/> Positive 5 <input type="radio"/> Very positive </p> <p>Why?</p>	
<p>2. What impact will the aging of the workforce have on the economic environment affecting your company/organization in the near future (that is, over the next 3 years)?</p> <p> 1 <input type="radio"/> Very negative 2 <input type="radio"/> Negative 3 <input type="radio"/> Not negative or positive 4 <input type="radio"/> Positive 5 <input type="radio"/> Very positive </p> <p>Why?</p>	
<p>3. Consider your answers to the two questions above and refer to the graph on the right:</p> <ol style="list-style-type: none"> Plot your answer to Question 1 on the horizontal “Age Pressure” axis. Plot your answer to Question 2 on the vertical “Economic Pressure” axis. Connect the two points to determine in which quadrant your organization lies and refer to the chart. 	<p>The graph is a 5x5 coordinate system. The horizontal axis is labeled 'Age Pressure' and ranges from 1 to 5. The vertical axis is labeled 'Economic Pressure' and ranges from 1 to 5. The four quadrants are labeled with letters in red boxes: A in the bottom-left, B in the top-left, C in the top-right, and D in the bottom-right.</p>

SUGGESTIONS

It can be helpful to share this type of exercise with a colleague or two, and compare your responses. Questions you might consider?

- ⇒ Do they share your assessment of the pressures facing your organization?
- ⇒ Do the pressures vary between their department and yours?

Review the details under each quadrant.

- ⇒ Can you identify potential partners outside and within HR?
- ⇒ How do you think age and economic pressures are impacting the work of these partners?

4. What your quadrant means and what to do about it.

Quadrant A

Low Economic and Age Pressure

In the Center's Talent Management Study, 24.2% of respondents reported to be in this quadrant.

- Consider your organization's overarching strategic goals, growth, globalization, deeper market penetration.
- Explore how workforce planning can support these goals & identify your potential partners.
- Assess your organizational demographics including life and career stage.
- Proactively plan & identify skills and competencies your organization will need to support strategic goals.

Quadrant B

Lower Age, Higher Economic Pressure

In the Center's Talent Management Study, 36% of respondents reported to be in this quadrant.

- Identify other organizational strategies impacted by the economy.
- Consider whether your organization is planning a workforce reduction & look at demographic projections to support this strategy.
- Has knowledge management been included in discussions? Consider doing a complete criticality assessment.
- Consider which business areas and positions are most at risk for talent shortages.
- Identify and target specific risk points that can help you to better allocate resources.
- Downsizing may offer opportunity to consider traditional staffing and training models.
- Consider if there are opportunities for employees to re-career within your organization.

Quadrant C

Higher Age and Economic Pressure

In the Center's Talent Management Study, 27.9% of respondents reported to be in this quadrant.

- Identify potential partners outside of human resources.
- Instruct your marketing and R&D departments to assess the impact of changing age demographics on your business.
- Identify areas of common interest & consider doing a complete criticality assessment.
- Consider which business areas and positions are most at risk for talent shortages.
- Identify and target specific risk points that can help you to better allocate resources.
- Take a micro rather than a macro approach to workforce planning.
- Identify the areas of your business that are still growing & explore where talent shortage is still a burning issue.

Quadrant D

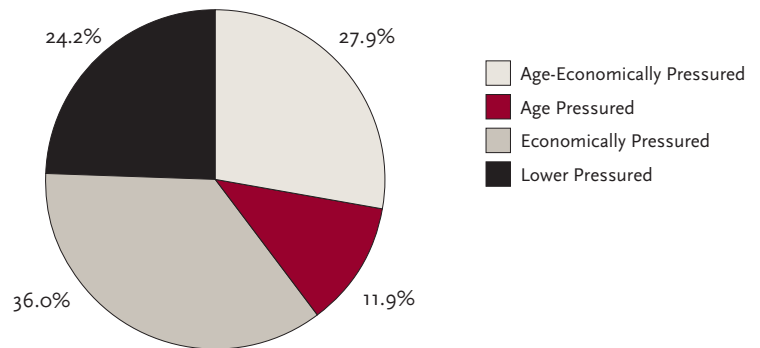
Higher Age, Lower Economic Pressure

In the Center's Talent Management Study, 11.9% of respondents reported to be in this quadrant.

- Identify potential partners within HR and organizational development.
- Consider who else is looking at age demographics.
- Discuss how information you have gathered can support mutual goals.
- Identify how your organization's age demographics align with your organizational goals.
- Consider if particular areas or occupations are at high risk; engage partners outside HR.
- Note what areas of the business are experiencing growth.
- Identify occupations that are becoming MORE critical & consider new staffing options, e.g. mid-career hires, etc.

Compare your responses.

The Center's 2009 Talent Management Study asked a nationally representative sample of employers these same questions. Figure below highlights their responses. How does your organization compare?



Understanding the pressures that affect a business' organizational situation (i.e., being age-pressured, economically-pressured, etc.) can help employers best tailor their workforce planning. For example, age-pressured employers will want to carefully assess the demographics of their workforce to determine the critical risk areas, and use this data to drive decision making. On the other hand, economically pressured employers may need to revisit earlier human resources priorities and redirect limited organizational resources to more immediately pressing issues.

Part 2. Workforce Planning:

Consider how changing AGE DEMOGRAPHICS are influencing your workforce planning and answer these questions:

Has your organization:	Not At All	Limited Extent	Moderate Extent	Great Extent
1. Analyzed the Demographic Makeup of your current employees?				
2. Analyzed projected retirement rates of your current employees?				
3. Identified areas and occupations in which retirement will be particularly consequential?				
4. Assessed how employee priorities and career intentions (of all age groups) align with your organization's goals?				
5. Assessed the skills your organization anticipates needing?				
6. Projected where internal talent gaps and shortages are most likely to emerge?				
7. Assessed competency sets of your current employees?				
8. Created succession plans that are informed by the need for knowledge retention?				
9. Developed age-related programs to assist in knowledge retention (mentoring programs, cross-generational teams, etc)?				
10. Explored how phased retirement and other programs for older workers can potentially ease labor force gaps?				
11. Been rethinking who to hire in response to changing age demographics?				
12. Developed new ways to retain and motivate an age diverse workforce?				

SUGGESTIONS

- ⇒ In all cases, understanding your organizations' labor force needs is critical. Identify whether you have pipeline issues, problems in particular business areas or unique challenges with specific occupations.
- ⇒ Look at where your organization is concentrating its R&D dollars; consider whether you will have the right talent in place when it's the right time to support these new opportunities.
- ⇒ For organizations that are economically pressured, it is especially important to prioritize gaps. Size of the workforce gap is an important measure, however, it is also important to measure risk. Consider the potential costs to the business if this gap is not filled.

Part 3. Implications & Suggestions

IMPLICATIONS:

1. Based on your answers above, which area of workforce planning seems to be most critical for your organization to address?
2. What is the first thing you will recommend your organization do in regard to workforce planning ?
3. What is the next thing you will recommend your organization do in regard to workforce planning ?
4. Did anything surprise you regarding your organization's workforce planning efforts? If yes, what?

Part 4. Resources

Available on the Sloan Center Website: <http://www.bc.edu/research/agingandwork>

- This tool is derived from: Pitt-Catsoupes, M., Sweet, S., Lynch, K., & Whalley, E. (2009). *Talent management study: The pressures of talent management* (Issue Brief No. 23). Chestnut Hill, MA: Sloan Center on Aging and Work at Boston College. Retrieved from http://agingandwork.bc.edu/documents/IB23_TalentMangmntStudy_2009-10-23.pdf
- Changing Age Demographics: Business Imperative or HR Distraction?
 - Article 1: The Way We Were and Still Are
 - Article 2: Leading Edge Strategic Adaptation
 - Article 3: Staying "Age-Responsive" in a Climate of New Organizational Challenges
 - Article 4: What is the Age-Identity of your Organization?
- Age & Generations: Understanding Experiences at the Workplace
- The Difference a Downturn can Make: Assessing the Early Effects of the Economic Crisis on the Employment Experiences of Workers

Additional Resources:

- AARP Workforce Assessment Tool: <http://www.aarpworkforceassessment.org>

ACKNOWLEDGEMENTS

The Sloan Center on Aging & Work at Boston College promotes quality of employment as an imperative for the 21st century multi-generational workforce. We integrate evidence from research with insights from workplace experiences to inform innovative organizational decision-making. Collaborating with business leaders and scholars in a multi-disciplinary dialogue, the Center develops the next generation of knowledge and talent management.

The Center on Aging & Work is grateful for the continued support of the Alfred P. Sloan Foundation.

Appendix 2.1

The General Social Survey: Sample, Analysis and Indictors

INTRODUCTION OF THE GENERAL SOCIAL SURVEY:

The General Social Survey (GSS) is one of the most widely used polls of behaviors, experiences and values held by American adults. For detailed information on the sample and methods, see <http://www.norc.org/GSS+Website/>. In order to increase the sample to a size that enables analysis of variation between industries and age groups, we combined 5 survey years (2000, 2002, 2004, 2006 and 2008). Industry coding is in respect to the 2007 North American Industry Classification System and required reclassifying 1980 and 1990 Census Industry Codes contained within the GSS using a cross step procedure summarized at this source <http://www.census.gov/hhes/www/ioindex/indcswk2k.pdf>.

Listed below are the phrasings of the questions in the GSS analyzed in this report:

To what extent do you agree or disagree with each of the following statements?

- I am willing to work harder than I have to in order to help the firm or organization I work for succeed.
- I am proud to be working for my firm or organization.
- There are so many things to do at work, I often run out of time before I get them all done.
- I would turn down another job that offered quite a bit more pay in order to stay with this organization.

On the following list there are various aspects of jobs. Please circle one number to show how important you personally consider it is in a job:

- Job security.
- High income.
- Good opportunities for advancement.
- An interesting job.
- A job that allows someone to work independently.
- A job that allows someone to help other people.
- A job that is useful to society.
- A job with flexible working hours.

For each, please tell me if the statement is very true, somewhat true, not too true, or not at all true with respect to the work you do (main job):

- I am given a lot of freedom to decide how to do my own work.

How often are you allowed to change your starting and quitting times on a daily basis?

How often has each of the following happened to you during the past three months?:

- I have come home from work too tired to do the chores, which need to be done.
- It has been difficult for me to fulfill my family responsibilities because of the amount of time I spent on my job.
- I have arrived at work too tired to function well because of the household work I had done.
- I have found it difficult to concentrate at work because of my family responsibilities.

How often do the demands of your job interfere with your family life?

In the last 12 months have you received any formal training from your current employer, such as in classes or seminars sponsored by the employer?

Some companies have organized workplace decision-making in ways to get more employee input and involvement. Are you personally involved in any group, team, committee, or task force that addresses issues such as product quality, cost cutting, productivity, health and safety, or other workplace issues?

Are you currently involved in a self-managed team?

Appendix 2.2

Sample Size, Distributions and Sector/Age/Gender Comparisons of Items from the General Social Surveys, 2000-2008 Combined Years

	Sector Comparisons				Comparisons Within the Manufacturing Sector								
					Age					Gender			
	N	Other Sectors	Manuf. Sector	Sig	N	20-39	40-55	55+	Sig	N	Men	Women	Sig
Organizational Commitment													
% Reporting satisfied or very satisfied with their job in general (SATJOB1)	3,495	90.1	86.4	**	404	83.6	88.1	90.6		404	88.4	82.2	
% Agree or strongly agree that they are very proud to be working for employer (PRIDEORG)	1,013	83.2	81.1		127	84.5	81.3	76.5		127	78.1	86.7	
% Agree or strongly agree that they are very willing to work harder to help employer succeed (HELPOORG1)	1,009	80.9	75.4		126	77.8	71.9	87.5		126	71.6	82.2	
% Agree or strongly agree that they would turn down a job with more pay to stay with employer (STAYORG3)	1,009	33.9	23.0	**	126	26.7	20.6	23.5		126	22.2	24.4	
Incentives													
% Reporting job security is one of the important or very important aspects of their job (SECJOB)	1,511	92.0	95.5		200	92.2	98.6	94.6		200	94.0	97.6	
% Reporting interesting work in a job is important or very important (INTJOB)	1,509	94.8	92.5	*	199	92.2	93.2	91.8		199	88.9	97.6	
% Reporting good opportunities for advancement in a job is one of the important or very important aspects of their job (PROMOTN)	1,511	86.5	91.0		200	100.0	87.7	87.8		200	91.5	90.4	
% Reporting helping others in a job is important or very important (HLPOTHS)	1,509	90.9	88.5	+	200	94.1	86.3	87.8		200	83.8	95.2	*
% Reporting high income is one of the important or very important aspects of their job to them personally (HIINC)	1,510	78.4	85.9		199	82.4	86.3	87.7		199	87.1	84.3	
% Reporting social usefulness in a job is important or very important (HLPSOC)	1,509	90.4	85.5	**	200	88.2	86.3	83.8		200	86.3	84.3	
% Agree or strongly agree that their job is interesting (RINTJOB)	1,013	86.0	80.3	**	127	82.2	82.8	64.7	+	127	81.7	77.8	
% Reporting independent work in a job is important or very important (WRKINDP)	1,509	79.2	80.0		200	72.6	80.8	85.1		200	76.9	84.3	
% Reporting flexible hours being one of the important or very important aspects of their job (FLEXHRS)	1,505	54.3	53.0		200	47.1	50.7	59.5		200	50.4	56.6	

	Sector Comparisons				Comparisons Within the Manufacturing Sector								
					Age					Gender			
	N	Other Sectors	Manuf. Sector	Sig	N	20-39	40-55	55+	Sig	N	Men	Women	Sig
Stress and Work Family Conflicts													
% Reporting they run out of time before getting things done at work atleast several times a month (TIMEWORK)	1,002	48.1	44.4		126	38.3	51.0	38.5		126	46.1	42.0	
% Reporting job interfere with family life atleast several times a month (WKVSFAM)	3,491	40.4	43.1		404	47.0	40.5	40.7		404	44.0	41.1	
% Disagree or strongly disagree that their job is rarely stressful (STRSSWRK)	1,000	48.7	42.8		124	44.4	47.1	34.6	+	124	42.5	43.1	
% Reporting they came home from work too tired to do chores atleast several times a month (TIREDHME)	1,157	40.5	40.5	+	148	45.8	53.6	14.3	**	148	44.6	35.4	+
% Reporting it is difficult to fulfill family responsibilitybecause of their job atleast several times a month (JOBVSFAM)	1,155	19.8	19.1	*	147	29.2	20.0	7.1	**	147	25.6	10.8	+
% Reporting it is difficult to concentrate on work because of familyresponsibility atleast several times a month (FAMVSWRK)	1,162	7.9	7.4		149	12.5	8.9	0.0	**	149	7.2	7.6	
% Reporting they arrived at work too tired to function because of household responsibilities atleast several times a month (TIREDWRK)	1,161	6.3	7.4		149	14.6	5.4	0.0	**	149	8.4	6.1	+
Flexible Work Options													
% Reporting they have complete or some freedom to decide their daily work (DAILYWRK)	1,014	81.5	67.7	**	127	75.6	64.1	58.8	+	127	68.3	66.7	
% Reporting they are allowed to change their schedule often or sometimes (CHNGTME)	3,481	55.3	44.1	**	404	38.3	49.4	51.9		404	43.3	45.7	
Inclusion in Decision-Making													
% Reporting they have complete or some freedom to decide how to do their job (WKFREEDM)	3,476	87.6	82.7	*	405	82.5	83.0	85.2		405	83.7	80.6	
% Reporting they have received formal training from their employer (EMPTRAIN)	1,696	49.5	45.7		188	50.6	47.3	34.5		188	46.5	44.1	
% Reporting they are involved in any task force for decision making (EMPINPUT)	1,684	31.8	34.8		187	32.1	39.2	31.0		187	32.6	39.7	
% Reporting they are involved in a self-managed team (SLFMANGD)	1,686	33.8	32.8		186	38.0	31.5	25.0		186	28.4	42.4	+

Source: General Social Survey 2000-2008 +p<.1 * p<.05 **p<.01

Appendix 3.1

The Talent Management Study: Sample, Analysis and Indictors

The 2009 Talent Management Study is a survey of a representative sample of employers in the United States as identified in the Dunn & Bradstreet database. Collected in April - August 2009, these data reveal the employment practices and priorities of 696 U.S. based employers. These organizations represent the 10 leading sectors of the U.S. economy that account for 83% of private sector employment and 85% of payrolls in the United States (construction; manufacturing; wholesale trade; retail trade; transportation and warehousing; finance and insurance; professional, scientific, and technical services; administrative support, waste management, and remediation services; health care and social assistance; and accommodation and food services). A stratified sampling strategy was adopted so that a proportionate representation of three groups of employers: smaller enterprises (employing 50-99 employees), medium sized enterprises (100-250+ employees), and large enterprises (250+ employees) was obtained. This study involved contacting a key human resources decision maker (most commonly presidents of smaller companies or human resource directors of larger companies), who then reported their company's characteristics, talent management practices, and competitive positioning via an online survey

instrument.

List of Questions:

Age composition of enterprises was measured by employers' reports of the proportions of their workforces that were (A) Under age 25 years, (B) age 25-39 years (C) age 40-54 years, (D) age 55-65 years, and (E) age 65+.

Expected change in age composition was measured by employers' reports of whether they anticipate changes in the age composition of their workforce over the next three years with regards to employees (A) Under age 25 years, (B) age 25-39 years (C) age 40-54 years, (D) age 55-65 years, and (E) age 65+.

Talent loss risks were measured by employers' reports of the average costs associated with replacing an employee at their organization.

Skills in short supply were measured by employers' reports of to what extent the following skills are in "short supply" at their organization: (A) management, (B) operation, (C) human resource, (D) finance, (E) administrative support, (F) legal, (G) technical computer, (H) sales/marketing, (I) basic literacy in writing and math, and (J) customer relations.

Talent management problems were measured by employers' reports of to what extent each of the following are problems for their business: (A) recruiting competent job applicants, (B) employees' performance, (C) absenteeism, (D) being able to offer competitive pay and benefits, (E) employees' loyalty to the company/organization, (F) morale, (G) providing effective supervision, (H) unwanted turnover, (I) knowledge transfer from more experienced employees to less experienced employees, (J) low skill levels of new employees, (K) shifts in the age demographics of the workforce, (L) conflict among employees from different generations, and (M) employee adjustment to new technologies.

Planning steps were measured by employers' reports of to what extent their company/organization has taken the following planning steps to ensure that it will have the people it needs, today and in the future: (A) analyzed demographic makeup of their company's/organization's workforce, (B) analyzed projected retirement rates, (C)

assessed employees' career plans and work preferences (e.g., through a survey or some other mechanism), (D) assessed the skills their organization anticipates needing, (E) assessed the competency sets of their current employees, (F) assessed supervisors' ability to anticipate and plan for staffing needs, (G) developed succession plans, and (H) developed processes to capture and transfer institutional memory/ knowledge from late-career employees to mid-career and early-career employees.

Age specific action steps regarding career programs for workers were measured by employers' reports of to what extent their organization has programs or policies for (A) recruitment, (B) training, (C) engagement, (D) career progression, and (E) retention for young, midlife, and older workers.

Flexibility Initiatives were measured by employers' reports of to what extent their company/organization has: (A) made a link between workplace flexibility and overall business/workplace effectiveness, and (B) established different options that allow employees to work in a flexible manner.

Flexible work arrangements were measured by employers' reports of approximately what portion of their employees (thinking about both full-time and part-time employees) can do the following: (A) if working full-time, reduce their work hours and work on a part-time basis while remaining in the same position or at the same level, (B) structure their jobs as a job share with another person where both receive proportional compensation and benefits, (C) phase into retirement by working reduced hours over a period of time prior to full retirement, (D) work part - year; that is, work for a reduced amount of time on an annual basis (e.g., work full-time during the fall, winter, and spring and then take the summer off), (E) take sabbaticals or career breaks— that is, take leaves, paid or unpaid, of six months or more and return to a comparable job, (F) take paid or unpaid time away from work for education or training to improve job skills, (G) take at least 12 weeks of extended leave (either unpaid or paid) for care giving or other personal or family responsibilities (e.g., parental or elder care giving responsibilities), (H) work part (or all) of their regular workweek at home or some other off-site location, possibly linked by telephone and computer, (I) work for part of the year at one worksite, and then part of the year at another worksite, (J) transfer to jobs with reduced pay and responsibilities if they want to, (K) request changes in their work responsibilities so that the job is a better fit with their skills and interests, (L) Make choices about which shifts they work, if they work a shift, (M) have input into the decisions about the amount of paid or unpaid overtime hours they work.

Presence of a culture of flexibility was measured by employers' reports of how true the following statements are about their company/organization: (A) supports employees who want to discuss their needs for flexibility with their supervisors, (B) makes a real effort to inform employees of available flexible work options, (C) clearly communicates the importance that working and managing flexibly has for business/organizational success, (D) clearly communicates the importance that working and managing flexibly has for employees' lives at work and at home, and (E) rewards or acknowledges

Appendix 3.2

Age Demographics: Manufacturing Sector (NAICS 31-33) Compared to Nine Other Leading Sectors: 2009 Talent Management Study

	All Sectors		Manufacturing		Manufacturing (Organization Size)		
	Manufacturing	Other Sectors	Age-Pressured	Not Age-Pressured	Small (50-99 employees)	Medium (100-249 employees)	Large (250+ employees)
Mean Age Composition of the Workplace							
Under 25 years - What is the approximate % of employees who are:	10.6%**	17.1%	10.3%	10.9%	8.1%*	13.1%*	12.6%
25-39 years - What is the approximate % of employees who are:	31.2%*	35.1%	28.6%**	34.6%	29.3%	33.5%	31.9%
40-54 years - What is the approximate % of employees who are:	38.1%**	31.0%	39.8%	36.2%	40.6%	36.1%	35.3%
55-64 years - What is the approximate % of employees who are:	16.7%**	13.7%	18.8%*	14.4%	17.8%	14.3%	18.0%
Older than 65 years - What is the approximate % of employees who are:	3.7%	3.0%	3.5%	3.9%	4.2%	3.1%	3.3%
Age Composition Expected to Increase Some or A lot							
Under 25 years	30.7%*	22.2%	30.6%	30.8%	25.4%	39.1%	27.3%
25-39 years	42.5%	38.0%	43.5%	41.5%	39.0%	47.8%	40.9%
40-54 years	37.8%	32.5%	43.5%	32.3%	25.4%*	50.0%	45.5%
55-65 years	28.3%	24.9%	35.5% +	21.5%	23.7%	23.9%	50.0%*
Older than 65 years	14.4%	14.7%	18.0%	10.9%	8.6%	11.1%	36.4%*

Source: Talent Management Study +p<.1 *p<.05 **p<.01

Appendix 3.3

Talent Loss Risks: Manufacturing Sector (NAICS 31-33) Compared to Nine Other Leading Sectors: 2009 Talent Management Study

	All Sectors		Manufacturing		Manufacturing (Organization Size)		
	Manufacturing	Other Sectors	Age Pressured	Not Age Pressured	Small (50-99 employees)	Medium (100-249 employees)	Large (250+ employees)
TALENT LOSS RISKS							
Mean costs associated with replacing an employee (\$)	22374.5	7472.7	38026.0	8145.9	23593.5	5450**	NA
Skills in Short Supply (% Moderate or Great Extent)							
Management skills	37.4%	37.5%	50%**	24.6%	37.3%	34.0%	44.0%
Operations skills	24.4%	22.2%	30.8% +	18.2%	25.0%	30.4%	12.0%
Human resource skills	18.2%	18.1%	18.2%	18.2%	15.0%	23.4%	16.0%
Finance skills	12.3%	17.0%	10.8%	13.8%	15.0%	15.2%	0.0%
Administrative support skills	10.6%	15.4%	10.6%	10.6%	10.0%	12.8%	8.0%
Legal skills	33.3%	28.6%	39.7%	26.8%	33.3%	35.7%	29.2%
Technical computer skills	22.1%	22.7%	22.7%	21.5%	22.0%	31.9%	4%*
Sales/marketing skills	28.2%	28.3%	31.8%	24.6%	25.0%	30.4%	32.0%
Basic literacy in writing and math	18.9%	16.6%	13.6%	24.2%	13.3%	27.7%	16.0%
Customer relations skills	14.5%	20.0%	15.2%	13.8%	16.7%	15.2%	8.0%
Talent Management Problems (% Moderate or Great Extent)							
Recruiting competent job applicants	45.1%	42.2%	46.2%	44.1%	49.2%	42.6%	40.0%
Employees' performance	24.8%	30.0%	26.2%	23.5%	26.2%	23.4%	24.0%
Absenteeism	27.8%	24.8%	30.8%	25.0%	29.5%	25.5%	28.0%
Responding to employees' family needs	15.8%	12.5%	20.0%	11.8%	18.0%	10.6%	20.0%
Being able to offer competitive pay and benefits	27.1%	29.7%	27.7%	26.5%	23.0%	36.2%	20.0%
Employees' loyalty to the company/ organization	19.5%	18.1%	27.7%	11.8%*	27.9%	8.5%*	20.0%
Morale	27.1%	23.4%	35.4%*	19.1%	31.1%	25.5%	20.0%
Providing effective supervision	26.3%	26.8%	29.2%	23.5%	27.9%	23.4%	28.0%
Unwanted turnover	21.1%	22.2%	24.6%	17.6%	19.7%	25.5%	16.0%
Knowledge transfer from experienced employees to less experienced employees	28.8%	22.9%	40.6%**	17.6%	27.9%	34.0%	20.8%
Low skill levels of new employees	30.3%	25.7%	31.2%	29.4%	32.8%	34.0%	16.7%
Shifts in the age demographics of the workforce	10.6%	11.6%	13.8%	7.5%	10.0%	8.5%	16.0%
Conflict among employees from different generations	3%+	7.6%	4.6%	1.5%	4.9%	0.0%	4.0%
Employee adjustment to new technologies	11.4%	16.9%	10.9%	11.8%	14.8%	8.5%	8.3%

Source: Talent Management Study +p<.1 **p<.01

Appendix 3.4

Risk Assessment of Talent Losses in the Manufacturing Sector (NAICS 31-33) Compared to Nine Other Leading Sectors: 2009 Talent Management Study

	All Sectors		Manufacturing		Manufacturing (Organization Size)		
	Manufacturing	Other Sectors	Age Pressured	Not Age Pressured	Small (50-99 employees)	Medium (100-249 employees)	Large (250+ employees)
Analyzed/Developed (% Moderate or Great Extent)							
Demographic makeup of company's workforce	25.8%	33.1%	28.8%	22.7%	26.2%	23.4%	29.2%
Projected Retirement Rates	16.7%*	25.2%	25.8%**	7.6%	21.3%	6.4%+	25.0%
Employees' career plans and work preferences	18.2%	23.9%	19.7%	16.7%	18.0%	17.0%	20.8%
Skills Organization Anticipates Needing	37.9%	45.7%	39.4%	36.4%	36.1%	34.0%	50.0%
Competency Sets of Current Employees	45.5%	51.4%	45.5%	45.5%	42.6%	46.8%	50.0%
Supervisors' Ability to Anticipate and Plan for Staffing Needs	40.5%**	53.2%	48.5%+	32.3%	41.7%	38.3%	41.7%
Developed succession plans	25.8%**	38.7%	21.2%	30.3%	26.2%	25.5%	25.0%
Processes to capture and transfer institutional memory/ knowledge	22.7%	29.6%	20.0%	25.4%	23.0%	17.4%	32.0%

Source: Talent Management Study +p<.1 *p<.05 **p<.01

Appendix 3.5

Talent Management Action Steps in the Manufacturing Sector (NAICS 31-33) Compared to Nine Other Leading Sectors: 2009 Talent Management Study

	All Sectors		Manufacturing		Manufacturing (Organization Size)		
	Manufacturing	Other Sectors	Age Pressured	Not Age Pressured	Small (50-99 employees)	Medium (100-249 employees)	Large (250+ employees)
Age Specific Action Steps							
Career Programs for Workers (Too Few)							
Recruitment Younger Employees	28.0%	25.9%	29.2%	26.9%	37.7%+	19.6%	20.0%
Recruitment Midlife Employees	28.0%	25.0%	30.8%	25.4%	36.1%	19.6%	24.0%
Recruitment Older Employees	33.1%	29.4%	35.4%	30.8%	38.3%	28.3%	29.2%
Training Younger Employees	40.2%	33.9%	43.1%	37.3%	37.7%	43.5%	40.0%
Training Midlife Employees	40.9%*	30.9%	44.6%	37.3%	37.7%	39.1%	52.0%
Training Older Employees	46.2%**	32.3%	46.2%	46.2%	41.7%	47.8%	54.2%
Engagement Younger Employees	40.0%	37.2%	43.8%	36.4%	39.3%	41.3%	39.1%
Engagement Midlife Employees	36.2%	34.6%	42.2%	30.3%	39.3%	34.8%	30.4%
Engagement Older Employees	39.2%	34.7%	42.2%	36.4%	41.7%	39.1%	33.3%
Career progression and promotion Younger Employees	51.5%	45.8%	60.0%+	43.1%	50.8%	51.1%	54.2%
Career progression and promotion Midlife Employees	48.9%	43.6%	58.5%*	39.4%	50.8%	43.5%	54.2%
Career progression and promotion Older Employees	51.9%+	43.9%	61.5%*	42.4%	53.3%	52.2%	48.0%
Retention Younger Employees	42.7%	40.6%	47.7%	37.9%	36.7%	47.8%	48.0%
Retention Midlife Employees	38.6%	35.5%	43.1%	34.3%	41.0%	39.1%	32.0%
Retention Older Employees	38.9%	34.2%	43.1%	34.8%	38.3%	41.3%	36.0%
Flexibility Initiatives							
Workplace Flexibility somewhat/ significantly increases business effectiveness	39.7%	45.8%	40.0%	39.3%	41.4%	38.6%	36.8%
Company Established Options that Allow Employees to Work in a Flexible Manner to Moderate or Great Extent	17.8%**	33.6%	15.9%	19.7%	26.7%*	8.5%	13.6%
Flexible Arrangements Available to Most or Nearly All Employees							
Reduce their Work Hours	3.1%*	10.1%	4.8%	1.5%	6.6%+	0.0%	0.0%
Job share	0.8%*	4.9%	0.0%	1.5%	1.6%	0.0%	0.0%
Phase into retirement	3.8%*	9.9%	4.8%	3.0%	6.6%	2.1%	0.0%
Work part-year	0.8%**	8.2%	0.0%	1.5%	1.6%	0.0%	0.0%
Take sabbaticals or career breaks	0.0%**	8.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Take paid or unpaid time away to improve job skills	5.4%**	16.7%	7.9%	3.0%	8.2%	4.2%	0.0%
12 weeks or More of Extended Caregiving Leave	37.7%	32.2%	38.1%	37.3%	34.4%	44.7%	31.8%
Work part (or all) at off-site location	0.8%+	4.3%	1.6%	0.0%	1.6%	0.0%	0.0%

Work at Multiple Worksites	0.8%*	6.0%	1.6%	0.0%	1.6%	0.0%	0.0%
Transfer to jobs with reduced pay and responsibilities	8.5%+	14.0%	6.3%	10.4%	6.6%	14.9%	0%+
Request changes in their work responsibilities	6.2%+	11.3%	6.3%	6.1%	5.0%	10.6%	0.0%
Make choices about which shifts they work	5.5%**	14.1%	3.2%	7.6%	1.7%	10.6%	4.5%
Have input into the amount of paid or unpaid overtime hours	0.8%**	8.2%	1.6%	0.0%	1.7%	0.0%	0.0%
Presence of a Culture of Flexibility is Generally True or Very True							
Supports discussions of flexibility with supervisors	51.2%**	71.0%	45.2%	56.7%	55.7%	53.2%	33.3%
Makes efforts to inform employees of flexible work options	35.2%**	52.8%	30.6%	39.4%	41.0%	31.9%	25.0%
Clearly communicates the importance of flexibility for business/organizational success	33.6%*	43.4%	33.9%	33.3%	39.3%	27.7%	30.0%
Clearly communicates the importance of flexibility for employees' lives at work and at home	27.3%*	37.8%	25.8%	28.8%	34.4%	21.3%	20.0%
Rewards supervisors who support flexible work arrangements	14.1%*	23.7%	9.7%	18.2%	19.7%	10.6%	5.0%

Source: Talent Management Study +p<.1 *p<.05 **p<.01

Appendix 3.6

Entire Sample Broken Down by Sector: 2009 Talent Management Study

	Number of Organizations	Percent of the Sample
Construction	58	8.3%
Manufacturing	134	19.3%
Wholesale Trade	36	5.2%
Retail Trade	78	11.2%
Transportation and Warehousing	26	3.7%
Finance and Insurance	45	6.5%
Professional, Scientific, and Technical Services	49	7.0%
Administrative and Support and Waste Management and Remediation Services	32	4.6%
Health Care and Social Assistance	125	18.0%
Accommodation and Food Services	113	16.2%
Total	696	100.0%

End Notes

- 1 Compensation (National Compensation Survey) is a term used to encompass the entire range of wages and benefits, both current and deferred, that employees receive in return for their work. In the Employment Cost Index (ECI), compensation includes the employer's cost of wages and salaries, plus the employer's cost of providing employee benefits.
- 2 These surveys, generated from face-to-face interviews, offer a window on the perspectives and values of a representative sample of Americans laboring within and beyond the manufacturing sector. A description of methods of studying the 1998-2008 General Social Survey, samples and measures, as well as additional relationships, are presented in Appendix 2.1 and Appendix 2.2.
- 3 The Family Medical Leave Act requires that employees have access to 12 weeks unpaid leave to accommodate their own or other family members' needs – such as for the birth of a child or to address the care needs of a spouse or an aging parent. Eligibility varies, however, depending on factors such as the establishment size, full time work status, and tenure, and thus a sizable proportion of the labor force is not entitled to this leave.

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